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 Scale Aviation Modeller International is always happy to review new products within its pages. Any item which you feel is suitable will be given due consideration for inclusion in the title. Any company, manufacturer, importer, distributor or reseller who wishes to have products reviewed within Scale Aviation Modeller International should send their details to the editor. Address and clearly mention to him the address of the editor. Confirmation of receipt of the samples will be issued if requested. For all international companies the above address. But please ensure that the package is clearly marked for customs as a sample, free of charge to reduce the risk of unnecessary delays. Thank you.

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Editorial

Volume 6 Issue 6

I never ceased to be amazed at the appetite that you all have for new products, reviews and information. In the past six years of this title we have seen our page count rise from 48 to 84, and we still have not got space to fit it all in each month! The mail box every day is full of letters asking for reviews and articles of this kit and that conversion, and although the building of such models is not a great problem thanks to our excellent contributors, finding space to get the feature in the magazine is. Over the past few months we have tried out a number of new design and layout ideas, as well as cutting down on the 'waffle' in the accessory and decal reviews. This has made a substantial difference and we are getting more and more information in each edition. I still want to do more though, and until such times as we can offer 100+ pages a month, or do this title fortnightly (only kidding!), I think that there may have to be further changes in our layout in the future.

Things are now starting to 'hot up' on the news front, with the Shizuoka show due in Japan during late May. No real surprises so far, but as you will have seen from our New Kit Listings in the last couple of issues, there are a lot of new kits due. As always it will be our intention to try and cover as many of these new products as we can. I know that our level of 1/72nd scale coverage is still not great,

and I would still welcome hearing from any of you who would like to contribute articles on models in this scale. To get a true balance across the whole spectrum we need to cover all the major scales, so if you feel up to the task, please give me a call.

Finally, many of you will have noted last month that I now have a PA (Personal Assistant). After six years the huge pile of letters and emails got too much for me, as I seemed to be spending more time responding to letters than actually writing the magazines. Mandy Hunt is the lady concerned and she will be in the office, 9am to 5pm, five days a week. As you will appreciate she does not have any understanding of this hobby (although you can talk to her about her sky-diving experiences), but she is there to assist with general enquiries etc, as I am not based in the office on a daily basis. Welcome aboard Mandy, please don't inundate her with calls just for a chat!

Richard A. Franks

Editor

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Jacques Niot builds this unusual French fighter using a rather rare 1/48th scale vac-formed kit



News Update

Airfix

1/144th

Now available in this scale from Airfix are the SAAB Viggen (#00105/£2.99) and F-104 Starfighter (#00106/£2.99).



1/72nd

New and reissued items in this scale include the RAF Personnel (#01747/£3.99), NATO Ground crew (#01758/£3.99) and NATO Europe (#01759/£3.99) figure sets as well as the Messerschmitt Bf 109E (#02048/£3.99), Junkers Ju 87B/R Stuka (#03030/£5.99) and the Battle of Britain gift set (#10999/£14.99), which comprises Lancaster B Mk I/III, Spitfire Mk Vb & Hurricane Mk IIc.



CMK

1/72nd

The latest accessory and conversion sets from CMK include the TP-40N conversion for the Academy P-40 kit (#7024/£9.85) and an interior set for the Academy OV-10A Bronco (#7025/£6.50).



Hi-Tech

1/48th

The kit of the Dassault Mystere IV is now available from this manufacturer. The kit features limited-run injection moulded plastic with etched brass and resin detail parts and is £24.95.

CzechMaster

1/72nd

New resin kits with decals from CzechMaster this month include the Supermarine Spitfire F Mk XIV (#1113) and the Supermarine Seafang FR Mk 32 (#1114), which retail for £18.00 and £17.65 respectively.



RVHP

1/72nd

The latest resin conversion from this manufacturer is the Grumman F9F-8T Cougar (#7239), which is designed for use with the Hasegawa Cougar kit and retails for £22.50.



Falcon

1/48th

The latest set of 'Clear Vax' canopies from this manufacturer is Luftwaffe WWII Part 4. This set (#38) includes canopies for the Messerschmitt Bf 109B-1, Messerschmitt Me 163B-1a, Heinkel He 111, Fw 190 Rammjäger and Ju 88S/T amongst others and retails for £9.50.

Revell®

1/144th

The odd looking Ekraneplan A-90 Orlyonok (#4609) is now available at £12.99.



1/48th

Back once more is the Northrop F-5E Tiger II (#5495) and it is £12.95 in the UK. Also available is the Bachem Ba 349 Natter & tower (#4613), which is the old Dragon tooling and is amazing value at just £10.99.



1/32nd

The all-new kit of the F-15D/E Eagle (#4755) from Revell® is now available. The kit features 20mm cannon, Sidewinder missiles, Mk 82 bombs, auxiliary fuel tanks and decals for the 58th Fighter Wing Commander's aircraft, Luke AFB. The UK price for this kit is £37.50.

Verlinden

1/48th

The most recent update set from Verlinden is for the F-84 Thunderstreak (#1536). It features a complete cockpit, ejection seat, instrument panel, opening

nose bay, rockets, bombs and dive brake and it is £20.40.

Aires

1/72nd

New items in this scale include a pack of two Martin Baker Mk 10A ejection seats (#7264/£3.50) and a gun bay detail set for the Tamiya F-84G Thunderstreak (#7266/£3.50).

1/48th

The most recent resin update sets in this scale are for the Tamiya Mosquito FB Mk VI/NF Mk II (#4886/£8.50) and the Revell®/Dragon/Trimaster Me 163B Comet (#4888/£8.50).

OKB-144

1/144th

This is a new manufacturer from Russia. Their first kit is the Tupolev Tu-104A, and it is injection moulded plastic with etched brass and Aeroflot decals, and it is £14.99.



Planet Models

1/72nd

The most recent resin kit release in this scale from Planet is the Junkers Ju 287 V3 [A-1] (#6872/£37.50).



1/48th

A resin kit of the Curtiss S-3C Seamew with wheels (#6948/£37.50) has just been released in this scale by Planet.



HR Models

1/72nd

The latest two resin kits from this manufacturer are Royal Aircraft Factory BE.12b with 141 Squadron decals (#7226) at £12.90 and the Polikarpov I-16/4 (#7249) which is £14.40.



Also available is a resin kit of the Farman M.E.11 complete with etched stuts and booms and French decals. This kit is

Mastercraft

1/72nd

Back once again is the TS-11 Iskra 200BR (#MFF-15) kit. It features Polish Air Force markings and is just £4.99.



£22.50.



Hasegawa

1/200th

Items due for release in this scale during April in Japan were the Douglas R4D-6 'JMSDF' (#10616/£14.00), Boeing 747-200 'JAL New Reso'cha Purple' (#10617/£18.00) and Boeing 747-4000 'JAL SRE Salmon Pink' (#10620/£18.00).

Noted for release at a later date is the Airbus A320 'ANA' (#L127/£1000).



1/72nd

Reissued in the UK during late April were the SAAB J-35J Draken 'Grey Scheme' (#00047/£9.99) and the F-4E Phantom (#CT02/£6.75). Other releases in late April included the F-104S Starfighter '50th Anniversary' (#00059/£8.99) and the P-3C Orion 'VP-47' (#00060/£20.00).



New and reissued items due in Japan during May include the TF-104G 'Bicentennial' (#00074/£14.00), Kawasaki T-4 '13th FTW New Scheme' (#00075/£14.00), Jaguar GR Mk 1 'Special Marking' (#00076/£14.00), B-17 Flying Fortress 'Nose Art' (#00077/£22.00), F-14B

News Update

Tornados 'Lantirn' (#00078/£2400), Tornado GR Mk I 'Special Markings' (#00079/£1800), F/A-18 Hornet 'NASA' (#00080/£1500) and the F-4J Phantom II 'Showtime 100' (#00081/£2200).

The oddly named 'Aero Dancing' series we mentioned last month is actually a range of kits tied into a new computer game. So far this series comprises the Fuji T-3 (#GC1/£1000) and F-104 Starfighter (#GC2/£1200). These will be followed in May by the Mitsubishi F-2A (#GC3/£1600) and Kawasaki T-4 (#GC4/£1200). This series will be further increased by the release of the F-4EJ (#GCS/£1800) and F-15J (#GC6/£1800) at a later date.

Announcements prior to the Shizuoka Show by Hasegawa include the reissue and revision of the PS-1 (#K8/£2000), Martin SP-5B Marlin (#K9/£2000), SR-71 & GTD-21B Drone (#K16/£2400), F-14A



'Black Bunny' (#SP5/£1600), RF-4E '501st Sqn' (#RA105/£2000), Ki-46-III Dinh (#CP6/£2000) and F-117A 'GBU-27' (#00086/£1600), all of which should be out during May in Japan. During June the F-16C 'Tiger Meet' (#D18/£1000), Ki-67 Hiyu & missile (#00082/£2800) and Mitsubishi F-2A (#00088/£1400) will be released, along with the reissue of the Heinkel He 51A/B (#00083/£1000) and Curtiss SOC-3A (#00084/£1000). A new set of US Weapons (X72-11/£500) will also be released in July.

KP

1/72nd

A large number of kits from this manufacturer are available once more. These include the Convair XFY-1 Pogo (#2/£4.99), Sukhoi Su-7 Fitter 'Soviet' (#73/£5.99) and the Sukhoi Su-7 Fitter 'Egyptian' (#75/£5.99).



1/48th

Available in the UK by late April was the Nakajima Ki-84-I Type 4 (#09334/£16.99).

Items due for release in Japan in April included the F-4J 'VF-84 Jolly Rogers' (#09338/£3000), F/A-18D 'VMFA(AW)-224 Bengals' (#09339/£5400) and F-15C 'Alaska Air Guard' (#09340/£4000).



New and revised kits due during May in Japan are the F6F-5 Hellcat '10000th Hellcat' (#09341/£2400), DH-6D 'JMSDF' (#09342/£1400), A-7E Corsair II 'Bicentennial' (#09343/£3200), Henschel Hs 129B-1 'North Africa' (#09344/£2600) and the Kawasaki T-4 '13th FTW New Scheme' (#09345/£2200).

Also noted are the reissue of the F-15A 'ASAT' (#CH-11/£4500) and the F-14A 'Black Bunny' (#SP9) during May. The all-new toolings of the George (#T73/£2000) and F-104J (#PT18/£2400) are also due very soon, along with the new decal options in the Ki-84-I (#09346/£2000), A6M5 Type 52A Zero (#09345/£2000) and F-16D (#09352/£2200).

A number of Revell-Monogram kits have been reissued in Japan in Hasegawa boxes and these include the Cessna A-37A (#HM162/£2600), F-20A Tigershark (#HM163/£2600), Republic P-105D (#HM164/£2600), Martin B-26B Marauder (#HM165/£4200) and the Me 262A (#HM166/£2600).

1/32nd

Back once again in the UK by late April were the Boeing P-26A Peashooter (#S08/£10.99), F-5E Tiger 'Patrouille Suisse' (#08117/£22.50), Spitfire Mk Vb 'R. Gleed' (#08118/£16.99) and Grumman F6F-3/5 Hellcat 'Pacific Aces' (#08119/£25.00). Hopefully available in the UK before too much longer will be the Fw 190D-9 'Fall of the Reich 1945' (#08120/£5200).

Due for release in Japan during April was the Spitfire HF Mk VI (#S8/£2800). Also due for reissue is the Ki-43-II Hayabusa (#08122/£3200) which will have 64th Fighter Group markings.

Due for release in May in Japan is the Me262A 'JG44 Galland' (#08123/£3200) and the F-104J (#S1/£3200).



Academy

1/48th

The most recent products released in this scale by Academy include the Messerschmitt Bf 109B (#2178), Boeing P-26C Peashooter (#2179), Seversky P-35A (#2180) and the Seversky P-36C (#2181). These kits are based on the old Hobbycraft toolings and they are £10.99 each.



Monogram

1/48th

Reissued recently under their 'Monogram Classics' was the Douglas TBD-1 Devastator (#7575), which is £9.99 in the UK.

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News Update

Special Hobby

1/72nd

The new Lockheed Orion 2 kit from Special Hobby is now available (#72019). This kit is £9.25 and includes decals for one Spanish machine and a Northwest Airlines operated machine.



MPM

1/48th

The new kit of the Petlyakov Pe-2FT (#48041) is now available from MPM. This kit includes decals for Soviet, Polish and Czechoslovak aircraft, as well as resin interior detail and injection moulded canopies. The UK price for this kit is £24.95.



1/72nd

The latest item in this scale is the Supermarine Spitfire PR Mk XI (#72086), which includes USAF and RAF (UK) and SEAC decal options and is just £7.25.



Fujimi

1/72nd

A number of kits are due to be reissued by Fujimi in May and they include the Alpha Jet 'German' (#21001/Y450), Alpha Jet 'France' (#21002/Y450), Alpha Jet 'Acrobat' (#22001/Y500), B-2C Hawkeye (#2108/Y2200) and the Yokosuka D4Y2 Suisei Model 12 (#7AC5/Y500).

1/48th

Due for reissue in May is the Messerschmitt Bf 109K-4 (#48001/Y2200).

APP



Aeroclub

1/48th

Now available from Aeroclub is their excellent mixed-media kit of the BAC Jet Provost T.5/Strikemaster (#48442) and it is £23.75.

Spin

1/48th

New resin and etched brass kits from this manufacturer include the Spad S.A.2 (#4803) with French decals and wheels, and the Spad S.A.4 (#4804) with Russian decals and both wheels and skis. Each of these kits is £24.95 in the UK.

Gavia

1/48th

The lovely new kit of the Polikarpov Po-2 (#4802) that we previewed last month is now readily available in the UK. The kit comes complete with a mass of Russian and Czech decal options and it is just £14.95.

Toga

1/72nd

Noted from this manufacturer is a MiG-21UM (#7207) with decals for Polish, Croatian and East German examples. This injection moulded kit may well originate from another manufacturer, but it is just £8.65 in the UK.

Mac Distribution

1/72nd

The most recent injected kit from this manufacturer is the Pfalz D.III (#7231), which features etched brass detail parts

and is £7.50.



Pavla

1/72nd

Most recent limited-run injection moulded kit from Pavla is the Miles M.38 Messenger (#72019). This kit features decals for Montgomery's personal aircraft and has resin, etched brass and vac-formed clear components. The UK price is £6.95.



Azur

1/72nd

The latest limited-run kit from Azur is the Potez 452 (#72112), which features marking for three French aircraft and is £8.00.

Kora

1/72nd

The most recent resin kit from Kora is the Jacht 71 German water glider (#72224), which includes Lufthansa decals and etched brass detail parts and is £12.60.



Dragon

1/48th

Reissued once again in Japan during April was the Gotha Go 229 (#5505/Y3000).



POMK

1/48th

A new series of Luftwaffe '46 kits will be released from this firm starting in April. The first kit in this series will be the Heinkel Lerche II.

Due for release in May is the Curtiss

Tamiya

1/72nd

Big news from Japan is that later this year Tamiya will scale-down a couple of their 1/48th scale kits to this scale. The two listed so far are the Supermarine Spitfire Mk I (#60748) and the North American P-51D Mustang (#60749). To date there is no confirmed price, but both of these kits will be released during June.



1/48th

Everyone is looking forward to the new kit of the Dornier Do 335 Pfeil (#61074) from Tamiya. To date there is no confirmed price, but the release date for Japan is noted as being in May.



1/32nd

Due for release in Japan during May is the F-4J Phantom II 'Marine' (#60308/Y11000).

News from Japan is that an all-new kit of the Mitsubishi A6M5 Type 52 Zero (#60309/Y6200) will be released in June. At the same time a motor for this kit will also be released (#60310/Y1500).

SOC Seagull, while in June there will be kits of the Bloch MB.150 prototype and the Bloch MB.152 C.1.

Correction

Unfortunately in the 'Modelling the Meteor' feature in Vol 6 Iss.4 (April 2000) we omitted to include all of the Meteor kits currently available from PJ Productions in Belgium, so what follows is a complete list for their kits.

Kits - 1/72nd Scale

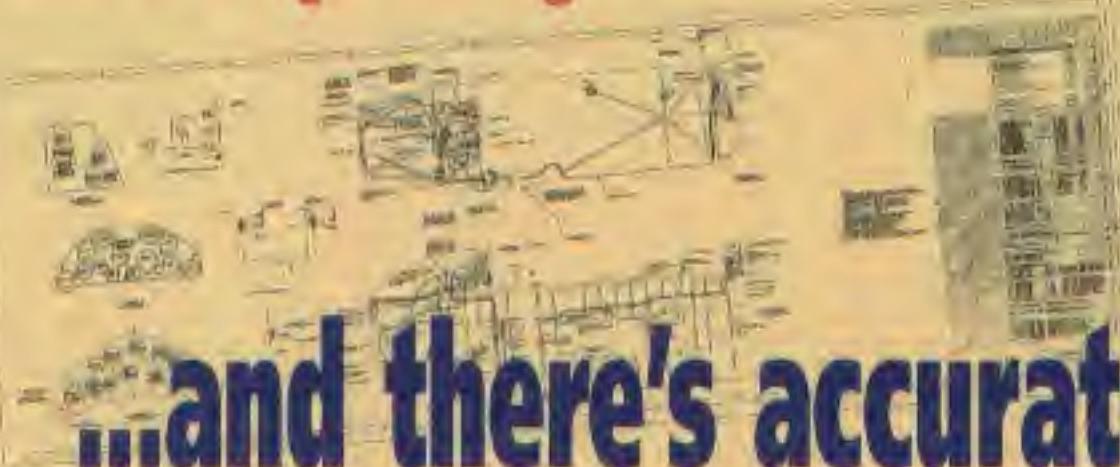
PJ Productions	R/VF	721003	Meteor F Mk IV (RAF)	DA
PJ Productions	R/VF	721004	Meteor F Mk IV (BAF)	DA
PJ Productions	R/VF	721005	Meteor F Mk B (RAF)	DA
PJ Productions	R/VF	721006	Meteor F Mk B (BAF)	DA
PJ Productions	R/VF	721009	Meteor T Mk 7 (RAF)	DA
PJ Productions	R/VF	721010	Meteor T Mk 7 (BAF)	DA
PJ Productions	R/VF	721011	Meteor NF Mk 11 (RAF)	DA
PJ Productions	R/VF	721012	Meteor NF Mk 11 (BAF)	DA
PJ Productions	R/VF	721013	Meteor NF Mk 11 (French)	DA

My apologies to PJ for the oversight ED



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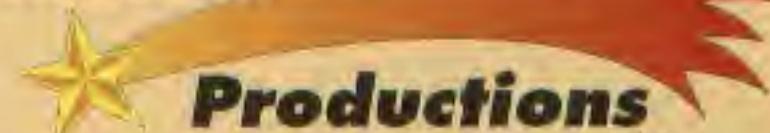
- Your parts are less likely to break or bend, because our resin is about three times stronger than anybody else's! We regularly cast extremely thin, strong parts other companies could do only in etched metal. Our superior castings give you substantially more bas-relief than is technically possible with etched metal. In short, our castings are far and away the best in the modeling world.
- You can confidently look to us for the most interesting and useful innovations in the hobby! We pioneered clear and tinted resin parts and flexible plastic, we're the leader in lost-wax cast brass aircraft parts, and we carefully engineer our sets to show the maximum accuracy and detail with the easiest painting and construction. We're the only aftermarket company with an active (and successful) research and development program.

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Previews



PZL Mi-2 URP-G 'Hoplite'

Scale: 1/72nd
Kit No: 758
Price: £TBA
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Injection Moulded Plastic
Parts: Plastic 62 (Grey), Clear 13
Decal Options: 1
Manufacturer: InTech
Obtain in UK via: Andy Pack Models & The Turntable.



Dornier Do P.59

Scale: 1/72nd
Price: £TBA
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Resin & Vac-formed Clear Plastic
Parts: Resin 33, Clear 1
Decal Options: None
Manufacturer: Unicraft
Obtain in UK via: Hannants



Chernovsky BICh-17

Scale: 1/72nd
Price: £TBA
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Resin & Vac-formed Plastic
Parts: Resin 26, Clear 1
Decal Options: None
Manufacturer: Unicraft
Obtain in UK via: Hannants



F4U-1D Corsair

Scale: 1/48th
Kit No: 2147
Price: £TBA
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Injection Moulded Plastic
Parts: Plastic 129 (Grey), Clear 2
Decal Options: 2
Manufacturer: Academy Plastic Model Co., Ltd
UK Distributor: Toyway



Chance-Vought F4U-4 Corsair

Scale: 1/48th
Kit No: 85-0082
Price: £TBA
Panel Lines: Recessed ✓
Status: Reissued ✓
Type: Injection Moulded Plastic
Parts: Plastic 72 (Blue), Clear 2
Decal Options: 2
Manufacturer: Revell-Monogram
UK Distributor: Revell®, Binney & Smith (Europe) Ltd.
Obtain in UK via: Aeroclub



SAVOIA-MARCHETTI SM.74

Scale: 1/72nd
Kit No: MS-74
Price: £TBA
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Vac-formed and Limited-run Injection Moulded Plastic
Parts: Plastic 37 (Vac), 36 (Inj), 3 Clear
Decal Options: None
Manufacturer: Broplan
Obtain in UK via: Aeroclub



Bell OH-58 Kiowa

Scale: 1/48th
Origin: Italeri (Italy)
Kit No: 60482
Price: £TBA
Panel Lines: Recessed ✓
Status: Reissue ✓
Type: Injection Moulded Plastic
Parts: Plastic 46 (Green), Clear 7
Decal Options: 2
Manufacturer: Heller S.A.
UK Distributor: Humbrol Ltd



MiG-29 Fulcrum

Scale: 1/144th
Origin: Hobbycraft (Canada)
Kit No: 4441
Price: £TBA
Panel Lines: Recessed ✓
Status: Reissue ✓
Type: Injection Moulded Plastic
Parts: Plastic 45 (Grey), Clear 1
Decal Options: 1
Manufacturer: Academy Plastic Model Co., Ltd
UK Distributor: Toyway
Obtain in UK via: Hobby Bounties Ltd.



Boeing 737

Scale: 1/160th
Kit No: DF342
Price: £4.00
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Injection Moulded Plastic
Parts: Plastic 42 (White)
Also Includes: Two-Piece Stand & Glue
Decal Options: 1
Manufacturer: Zhengdefu
Obtain in UK via: Hobby Bounties Ltd.



North American T-28A

Scale: 1/48th
Kit No: 85-0028
Price: £TBA
Panel Lines: Recessed ✓
Status: Reissued ✓
Type: Injection Moulded Plastic
Parts: Plastic 30 (Silver), Clear 2
Decal Options: 2
Manufacturer: Revell-Monogram
UK Distributor: Revell®, Binney & Smith (Europe) Ltd.



Sukhoi Su-22 Fitter

Scale: 1/144th
Origin: Hobbycraft (Canada)
Kit No: 4438
Price: £TBA
Panel Lines: Recessed ✓
Status: Reissue ✓
Type: Injection Moulded Plastic
Parts: Plastic 39 (Grey), Clear 2
Decal Options: 1
Manufacturer: Academy Plastic Model Co., Ltd
UK Distributor: Toyway
Obtain in UK via: Hobby Bounties Ltd.



U.S.A. "空军一号" 总统专机

Scale: 1/300th
Kit No: DF357
Price: £4.00
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Injection Moulded Plastic
Parts: Plastic 32 (White)
Also Includes: Two-Piece Stand & Glue
Decal Options: 1
Manufacturer: Zhengdefu
Obtain in UK via: Hobby Bounties Ltd.



Jian II/MiG-15bis

Scale: 1/72nd
Kit No: DF321
Price: £3.25
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Injection Moulded Plastic
Parts: Plastic 44 (Grey), Clear 2
Also Includes: Tube of Glue
Decal Options: 6
Manufacturer: Zhengdefu
Obtain in UK via: Hobby Bounties Ltd.



Breguet 693A/B

Scale: 1/48th
Kit No: 6004
Price: £29.95
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Limited-run Injection Moulded Plastic, Resin, White Metal, Etched Brass & Vac-formed Clear Plastic
Parts: Plastic 39, Resin 14, White Metal 17, Etched Brass 78, Vac-formed Clear Plastic 10
Decal Options: 5
Manufacturer: Fonderie Miniature
Obtain in UK via: Hannants



I.D.F. Fighter

Scale: 1/48th
Kit No: DF331
Price: £5.00
Panel Lines: Recessed ✓
Status: New Tooling ✓
Type: Injection Moulded Plastic
Parts: Plastic 94 (Grey), Clear 3
Also Includes: Tube of Glue
Decal Options: 1
Manufacturer: Zhengdefu
Obtain in UK via: Hobby Bounties Ltd.



Messerschmitt Me 410

Scale: 1/32nd
Price: \$1BA
Panel Lines: Recessed ✓
Status: Revised Tooling ✓
Type: Resin, White Metal & Vac-formed Clear Plastic
Parts: Resin 59, Metal 3D, Vac-formed Clear 5
Also Includes: Walcor German Instrument Bezels and Rudder pedals
Decal Options: 3 (inc Stencils)
Manufacturer: Scratchbuilders
Obtain in UK via: N/A

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CEC32024 T-48 Update Set; adds leading edge slats and airframe & cockpit upgrades—for the later T-48's. You get accurate and epoxy cast outer wing aileron and slat, innercam slat and mounting mechanism, 8ft4-10ft antenna, TSEO with clear lens, static radomes, etc. This conversion requires the Cutting Edge conversion set CEC32023, T-48 Hard Wing Conversion. \$39.95

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CEC48067 St 1932 'Zwing' Conversion (includes two Hobbycraft St 1932-23 kits) \$29.95

CEC48068 LC-130 Sk Conversion set for Testors/Italeri CV-130 \$19.95

CEC48070 SF-35 Whirlwind Conversion for 'Family' parts remodeled in 1/48 & white metal! \$39.95

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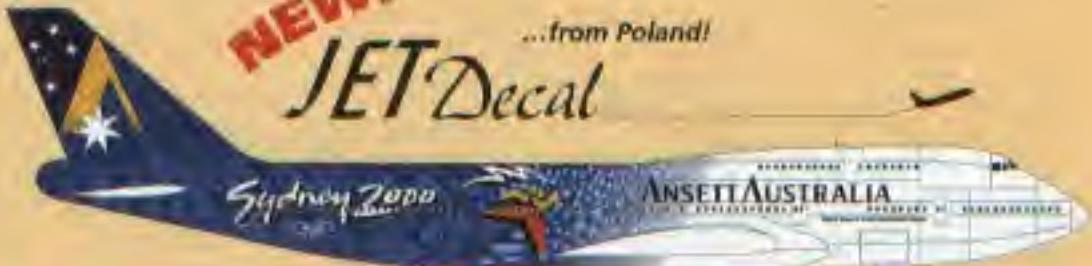
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Aviatik (Berg) D.I

Technical Data

Scale:	1/72nd
Price:	£4.49
Kit No.:	120
Panel Lines:	Recessed ✓
Status:	New Tooling ✓
Type:	Injection Moulded Plastic
Parts:	39 Plastic (Grey)
Decal Options:	2 (inc Lozenge Decals)
Manufacturer:	Toko
UK Importer:	Pocketbond Ltd

The Kit

All the well defined, flash free, light grey plastic parts for this classic Austro-Hungarian single seater, flown by ace Frank. Linke-Crawford are supplied on two sprues. The fuselage halves are complete with relief mouldings of the internal structure to complement the basic dash, rudder pedals stick and seat. Clear parts are not provided and so modellers will need to add the vestigial wind screen from scrap. Strangely the lightweight tail struts are also absent. However, this is no big deal. The quality of the parts supplied, especially the Austro-Daimler engine, more than compensates for this omission. The decal set also deserves special mention providing octagonal painted fabric effect camouflage for the fuselage, upper wing surfaces, tail, fin and rudder.

Instructions

These follow the standard comprehensive Toko format of four loose leaf pages with, brief type history and technical specifications, sprue identification diagram, exploded construction diagrams and painting and decal instructions to complement the box art. Typically the box art provides the only rigging guide.

Good references to complement the detail supplied may be found on page 18 and 19 of Harleyfords' *Fighter Aircraft of the 1914 - 1918 War* and in Dr Martin O'Connor's *Air*

Aces of the Austro-Hungarian Empire 1914-1918¹ on various pages especially p 39, where there are two pictures of Linke-Crawford D.I S/N 115,32.

Construction

This is really quite straightforward, commencing with a minimal clean up of the parts and drilling the strut socket holes to ensure correct fit. After the fuselage was completed I attached the lower wings before spraying the assembly gloss white together with the upper wings, tailplane, fin and rudder to give better adhesion to the comprehensive decal fit. The decals were then applied. The fuselage decals are a little awkward, with obscure scissor cutting guides on the decal sheet. It turns out that the decals fit the fuselage from the bottom up and there is considerable excess, which needs to be trimmed off the top centre line if both sides of the camouflage pattern are to match up. Mine didn't as the photographs show - perhaps I will be second time lucky.

In retrospect it would have been much easier to spray and decal all the main components before attaching the lower wings to the fuselage, but Micro Sol products worked well and the end result was quite acceptable.

My plans indicated a stagger of 12° with the lower wings flat and plasticard was used to fabricate an appropriate jig.

Readers may not be surprised to learn that the main struts were fitted first and when dry the 'N' shaped cabane struts offered up to check the fit. The front upright cabane struts fit perfectly, but the rear ones are too long. The solution was to cut the front struts away from the 'N' and fit them. Then cut the rear struts from the diagonals, shorten them to fit and install them. Lastly adjust the diagonals to fit.

I decided to let my eyes have a rest and left



the rigging and the attachment of the tail struts (all from sprue) to another day.

Accuracy

The machine has a span of 26ft 3in and length of 22ft 7in making it 2.5 scale inches too large in span and 3.5 scale inches too long. It matches the plans in Harleyfords to a 'T', looks right and is, therefore, about as good as we are ever likely to get.

Decals

There will no doubt be endless arguments about the colour of Linke-Crawford's machine, but the comprehensive decal set appeared to me to be very faithful to the black and white photo references, being silk finished, sharp, in register and adhering well, but again the density of the white areas, particularly the Patec crosses could have been better.

An alternative colour scheme for a machine flown by Peter Franko between December 1918 and February 1919 in Temopyl-Krasne will appeal to lovers of the very exotic.

If the supplied options don't inspire, what about D.I S/N 138-99 flown by Friedrich Hefty in a very modern looking brown/green mottle?

When first put into water the decals curled up immediately and were very prone to fracture if any attempt was made to straighten them out prematurely. Otherwise they were acceptably robust if handled with due care. It was relatively easy to mix standard enamels to match the decal hues and touch up any damaged areas.

Decal Rating = 9/10.

Conclusion and Recommendation

A superb kit, excellent value for money and pure pleasure to make and there is plenty of scope amongst the 740 or so built for considerable customisation. For those who want to guild the lily, a set of etched spoked wheels would be a considerable enhancement for very little outlay.

Sincere thanks to Toko for their services to WWI aero-modelling and to them and Pocketbond Ltd for this review sample.

Simon Shape

Note: All ex-Toko moulds are now owned by Eastern Express and will soon be reissued - Ed.

Albatros W.4

Technical Data

Scale:	1/48th
Price:	\$73.99
Panel Lines:	Recessed ✓
Status:	New Tooling ✓
Type:	Resin, White Metal & Etched Brass
Parts:	Resin 10, Metal 21, Etched 83, Acetate 14
Decal Options:	1
Manufacturer:	Copper State Models
UK Source:	Aeroclub

The Kit

The W.4 was known to the British as 'Blue Bird' and caused them some consternation in the Aegean where it was treated with some respect by its adversaries. It fell from favour in the German Naval Service with the arrival of the even more respected Hansa-Brandenburg W.12. Of the 118 W.4's built, 67 were still flying at the War's end.

The plain white corrugated box contains a plethora of etched-brass and white metal parts in individual bags and a small

number of resin 'blocks'. The fuselage, wings and floats which constitute only 9 parts are highly detailed on the external surfaces. The wings are particularly fine and the tailplane even feels as if it is fabric over a wooden frame! Superb! The remainder of the parts appear to be made up of a collection of Copper State's aftermarket items that are appropriate to this machine. For example the engine, cockpit details and even the dials and dial faces for the instrument panel. All the struts and the prop are white metal and some of these need some cleaning up.

The Instructions

At first glance, these look very comprehensive. There are eleven sheets of A4 containing a brief history, a parts list and a parts identifier (invaluable), four sheets of scale plans, two more containing finishing details and one sheet provides drawings of the cockpit area and its various components along with some rudimentary written instructions. The final sheet contains the manufacturer's instructions



that basically tell the modeller to build the model using the drawings supplied and

recommend the use of Windsock's Datafile Number 1. Oh, and to use Superglue! They

also say that the model is designed for advanced modellers, and they are not joking. I think a couple of sheets of stage-by-stage building diagrams and a few written words of explanation would not have gone amiss and would enable less experienced modellers to build this super aeroplane.

Construction

This can only begin after a lot of thought and once all the parts have been identified. If you are used to opening the box and beginning with only a cursory glance at the instructions only to discover that you left something out along the way, this one will cure you of that little habit! I started in the cockpit and eventually had all the parts in place and painted. The end result is highly detailed and it is a shame to hide it inside the fuselage. Closing the fuselage around it is tricky and some fitting and filing was required. Similar difficulties were found in the engine compartment but once completed very little filler was required along the join lines. The lower wings were added to the fuselage and painting began. I had primed all the grey resin parts with

white undercoat prior to using them and once gloss varnish had been added to the top surfaces I found applying the lozenge decals to be relatively trouble free. The floats proved to be the exception to the rule and I had several tries at getting this area to a satisfactory finish, even contemplating painting the lozenge on at one stage. Holes were drilled for the purposes of rigging and a jig built to support the float structure and top wing during assembly; then another minor disaster. The struts appear to be all the wrong sizes and careful counting of parts and measuring on the drawings was necessary prior to trimming them to get a complete set all the right sizes. Rigging then recommenced and after a few fraught moments was eventually successful. Now came the identifying of all the remaining bits in the box and applying them to the model, sounds simple? Eh? Eventually, I fixed the last of the parts I could identify in place and applied a few finishing touches. I have never been more relieved to finish a model but what a little cracker.

Accuracy

My finished model measured 1960mm in

span, which is 'real' terms is 9.4m, as opposed to the 9.5m of the original aircraft. The length (including floats) measured 175mm, which in 'real' terms is 8.4m, while the original machine was 8.5m. Finally the height was 75mm ('real' 3.6m) and the actual aircraft was 3.65m. Shape and outline is definitely a W.4, so I can surmise that the model is accurate at 1/48^{1/2} scale.

Colour Options

Only one is supplied in the instructions and on the decal sheet, number 1512 of the German Naval Air Service in October 1917. All upper surfaces are covered in the Naval lozenge fabric with the wing under surface in linen and the fuselage Light Grey (Humbrol 127). The fuselage sides were finished in a slightly darker grey (Humbrol 87). I must stress that these colours are my interpretation of the German Naval camouflage colours used in the period.

Decals

All the naval lozenge decals are supplied and are reasonably thin. Getting them to contour to the top of the highly detailed floats required several coats of MicroSol

and tested my patience on a couple of occasions. Fortunately there are adequate lozenge decals provided to allow for errors, provided some thought is given to their usage prior to cutting to shape. The remaining national insignia and number codes etc are well registered and settle a treat onto a gloss surface with no ill effects.

Decal Rating = 10/10

Conclusion & Recommendation

The end result is a beautiful model but it took some getting there. This is only for the more experienced practitioners of our hobby and the patient amongst them. I can't say I really enjoyed building it as I kept putting it aside and coming back to it over a seven month period. However, I am enjoying looking at it in the model cabinet, as it is a real cracker!

My thanks to Copper State Models for the review sample and my apologies for taking so long to finish it,

Dan Claxton

Heinkel He 45

Technical Data

Scale:	1/72nd
Price:	£8.20
Kit No.:	72006
Panel Lines:	Recessed
Status:	New Tooling
Type:	Limited-run injection moulded Plastic, Etched Brass & Vac-formed Clear
Parts:	Plastic 54 (Grey), Etched 11, Vac-form Clear 2
Decal Options:	4
Manufacturer:	AML
Obtain in UK via:	Hannants

The Kit

The kit is moulded in light grey plastic, and in common with most limited-run kits, there is a fair amount of flash to be cleaned up before construction begins. The plastic sprues are also very heavy and care is needed to release the parts safely. The etched brass sheet was very finely detailed and there was also a clear sheet for the instrument panel backing.

Instructions

An eight-sided A5 booklet is provided with a parts layout, assembly diagrams and four sides of colour scheme information. The paint chart gives the RLM, F.S. and Humbrol paint numbers. A short aircraft history is also given, which contained more detail than any other source I had.

Construction

The construction sequence was straightforward, starting as always with the cockpit. The majority of the brass components are used in the cockpit; unfortunately these proved to be almost invisible once the fuselage halves were put together. The fuselage and wings required a fair amount of cleaning up before fitting together, and some filler to blend the

joints together. The rear cockpit can be built in two ways, open with a ring-mounted machine gun, or enclosed for the later trainer version. The upper wing needs at least three hands to assemble it and the indented marks for the strut location are totally wrong. I filled these and started again by measuring and marking the location points on the underside of the wing, then offering this up to the rest of the aircraft which had the struts already mounted. Similar dexterity is required to get all the undercarriage components lined up and glued into place. Finally the rigging was added between the wings, made from old guitar wire sprung into pre-drilled holes.

Accuracy

The finished model scaled out to 10.08m long and 11.52m wingspan, as the original is quoted in Putman as 10m by

11.5. I think that is excellent. It does look a chunky little aircraft and matches up well with the photographs I've seen of the He 45.

Colour Options

Four colour options are detailed in the instruction booklet, two from 1937 and one each from 1940 and 1941. The first is a two-tone brown and grey scheme for an aircraft based at Torrelavega, September 1937. Next is an all-over light grey scheme of the Condor Legion, Leon, November 1937. The later two are both in RLM light grey as trainer aircraft from Olimutz, 1941 and Bregg in 1940. The rear of the box also gives a four-view colour alternative for a three-tone camouflaged aircraft based at Leon.

Decals

Decals are provided to cover all of the five

schemes mentioned above. These are by Propagteam and are excellent. The decals have a good colour depth and adhere very well to the painted surface with no extra preparation. My only comment on these is that they do require care in handling because they are thin, but the care is worth the effort as the final result is brilliant.

Decal Rating = 10/10

Conclusion and Recommendation

The final result is a good model of the He 45 but the construction does require care and patience. Recommended for experienced modellers especially interested in early Luftwaffe aircraft.

My thanks to Hannants for the review sample.

Paul G. Gilson



Republic P-47M Thunderbolt

Technical Data

Scale:	1/72nd
Price:	£2.95
Kit No.:	04141
Panel Lines:	Recessed ✓
Status:	New Tooling ✓
Plastic Colour:	Grey
Type:	Injection Moulded Plastic
Parts:	Plastic 62, Clear 3
Decal Options:	2
Manufacturer:	Revell AG
Distributor:	Revell®, Binney & Smith (Europe) Ltd.

The Kit

Since it was first announced I looked forward to building this kit and it was a pleasant surprise to receive it for review. At first impressions it seemed worth the wait, but more of this later. The parts are beautifully moulded in a pale greyish colour with excellent recessed panel lines and surface detail.

Cockpit detail is perfectly adequate in this scale and I don't see any real need to add more just careful painting will give the desired effect. The well-detailed undercarriage bay is moulded to the undersides of the upper wing halves, and there is a well produced power plant with the main cowling gills in the open position. Underwing stores consist of ten 5in HVAR rockets and a pair of P-38 style 150 gallon drop tanks.

Instructions

These follow Revell's usual format (the heading referring to the kit as a 'Thunderbolt!') with all colour references quoted from their own brand but this shouldn't deter most modellers. The build sequences are fairly easy and clear to follow. I must state here that the stages indicating the attachment of the tanks and rockets should be ignored because the P-47Ms did not carry these. The only unit to operate the M, the 56th FG, only carried out ground attack missions with the bazooka tubes but it was not their prime role. The 5in HVARs only came into use with the next version the 'N', and these were only operated in the Pacific campaign! As for the tanks, they could have been used by the said unit but I have seen pictures of them fitted to aircraft of the 9th AF so the choice is yours.

The two colour schemes are on the last two pages and clearly show decal placement and the painting guide.

Construction

Before I begin any building, I seek out any drawings and references I may have on the subject to check how good the kits are. For the P-47 I checked the outline shape of the main airframe against the drawings in the MBI publication. This is where the worst errors revealed themselves. First the fuselage profile of the kit is too deep around the forward belly area by about 1.5mm or the plastic thickness, and on the upper forward area there is an apparent hump just behind the cowl gills which slopes downward towards the windscreens. Both need attention and some surgery as the fuselage makes the cowling look too small which it is not.

The hump, I assume, is probably due to the open gills in order to follow the profile, but why this is done I don't know. Anyway I gently squeezed these into the closed position and in so doing got an instant improvement. With the cockpit assembly suitably decorated the fuselage was joined together. As for the hump I sanded this down to the right profile taking care not to go too far. The lower fuselage area around the shackle was sanded down to reduce the depth as much as I dared. If I had more time I think the alternative method to improve the looks would be to make a saw cut along a panel line, then sand down the edges and rejoin the severed parts and finish off with filler if necessary, with a final sanding to restore the shape and the shackle for the drop tank or whatever. The engine assembly was then fitted to the fuselage to complete this stage.

The other outline error discovered lies with the wings. Actually it is just the flaps which need a little shaving down. This I dealt with by assembling the wing halves and by referring to the drawings I reduced the chord of the flaps by 1.25mm (approx.) at the root end to nothing at the end where they meet the ailerons thus effectively correcting the planform of the wings. The edges were then sanded to a nice sharp trailing edge. Incidentally the fillets on the fuselage which

added the undercarriage when I noticed another error which needed checking but I was too late. The main gear legs are too short by about 2mm thus giving the whole model a rather squat appearance, even though they are depicted under load.

As a consequence the gear doors are in the wrong positions. This does spoil the whole look of the model a bit, but again could be corrected by inserting a suitable extension or using legs from another kit. Finally a couple of plus points. The landing light positioned further out towards the wing tip is correctly depicted as it was displaced by the wing mounted airbrakes; and the clear canopy parts fit a treat.

Accuracy

The wingspan of 40ft 9ins and length of 36ft 1.75ins of the full size aircraft is well matched by the model at 7in and 6in, so the kit is accurate within these dimensions. Among the good points about the kit is that the wing guns are set at the correct horizontal line to the dihedral and the tiny tabs at the trailing edge of the tail planes are faithfully depicted. It is a shame about the fuselage and wing outline errors and the rather too short main gear legs as otherwise this kit would have been among the front runners of Thunderbolt kits in 1/72nd scale.

Colour Options

Two options are included in the kit and both

56 Aluminium for the bare metal areas and when thoroughly dried I treated it with SN compound to achieve an acceptable metal finish. All detail painting was done with Humbrol paints of appropriate shades. Finally a coat of gloss for decal preparation and then a coat of AeroMaster matt acrylic varnish to finish off.

Decals

Revell's decal sheets have been the victims of some flak in the past but I think they have improved. The decals with this kit are nicely printed though a trifle thick.

Register is quite good with only a slight misalignment of the red white code letters which is not that noticeable. There was no problem when used with decal solvents and no silvering. Also none of that horrible brown gluey stuff that appeared on other decal sheets by Revell.

Colour density is good too, the red serials showing up well against the base colour for example. There are stencils included to finish off. A nice touch is the horse shoe decal for Lannowski's aircraft. On the real machine it was a horseshoe welded to the side of the fuselage just below the windscreen.

On the whole a pretty good sheet.

Decal Rating = 8/10

Conclusion and Recommendations

This kit is really quite easy and enjoyable to



meet the flaps need reducing to complete the task. To do this and to correct the fuselage it is helpful to have accurate drawings. I also compared the parts to MBI plans and these too showed the same faults. All the remaining assembly is very straightforward with no real problem encountered during any of the stages. Also no filler was needed anywhere so the kit scores well on this point, the wing to fuselage joint being particularly good, a break from the norm being the lack of the usual tabs. Instead the wheel bay walls extend from the root into the fuselage completing a nicely boxed-in bay and an effective join. A nice touch is the separate fin fillet. This was a field modification as too were the wing pylons, so one can model the 'M' as it first arrived at the 56th FG. I had completed the painting and

are aircraft of the 61st PS, 56th PG, in black (some sources state it as blue-black or a very dark Indigo) with natural metal undersurfaces and leading edges to wings and tailplanes. The group identifier of a red cowling front and red rudder for the squadron colour complete the main colours. Also both depicted aircraft were flown by ace Polish pilots; HV-M flown by Capt Mike Gladych and HV-Z flown by Capt Witold 'Lanny' Lannowski. I was fortunate to meet Lanny at an airshow back in the 80s and when discussing his aircraft colour he told me that it was 'nearly black' depending on the lighting conditions! I decided to finish my model as HV-M as I have already done Lanny's, and I used Humbrol for the black with a touch of blue added (it still came out black!) and Humbrol

build and all parts fit very well. If it wasn't for the overly deep fuselage and the other errors pointed out above which spoil the look and sit of the model this kit would be a winner. If you are prepared to accept these then fine. If not, then a little extra work needs to be done. Incidentally it does not need to be restricted to being an 'M' as by using references and a change of decals and prop where necessary a 'D' can be made from the kit. I can recommend this kit to all.

My thanks go to Revell® Binney & Smith (Europe) Ltd for the review sample.

Paul Janicki

Albatros Dr.I

Technical Data

Manufacturer:	Eduard 'Profi Pack'
Scale:	1/48th
Status:	New Tooling ✓
Panel Lines:	Engraved ✓
Fabric Effect:	Raised ✓
Price:	£14.95
Type:	Injection Moulded Plastic Resin & Etched Brass
Parts:	Plastic 62, Resin 4, Etched 38
Decal Options:	1
Manufacturer:	Eduard M.A.
Obtain in UK via:	LSA Models (Incorporating Four Plus UK) & Hannants

The Kit

Displaying the usual excellent artwork that has come to be expected from this company and featuring the only aircraft of its type ever built (as far as I know!) the Albatros Dr.I has now been reproduced in 1/48th scale and is one of the best kits I have yet seen from this company. The sixty plus injection moulded components are in the usual grey plastic and the improvement in this process is remarkable, they are excellent. Also included are resin parts for the Spandau machine gun breeches and muzzles. The barrel tubes, ends and cocking mechanisms are on the etched fret. With the addition of a small piece of plastic rod to represent the actual gun barrel these parts make up into the best machine guns it has been my pleasure to build; however if you are reluctant to try your hand with these then full injection moulded versions are supplied, the same applying to the pilot's seat.

Instructions

The standard folded eight sides giving a brief history (which it was) in four languages, sprue and fret layout and the usual clear step by step assembly drawings. The equivalent manufacturer's numbers are supplied for the colours needed.

Construction

Naturally begins with the cockpit interior. As the fuselage is of a varnished plywood, I gave the interior a

coat of Light Wood Brown and when dry this was given a wash of a well diluted Matt Black to accentuate the interior framework. It was not necessary to add anything to the construction at this stage, my only comment being to leave the installation of those excellent machine guns until late in the construction, as the model needs a lot of handling and they are rather fragile.

The engine installed and the fuselage assembled there were a lot of etched panels and inspection doors to be fitted, however before this, the upper front cowlings were masked and given a coat of Humbrol No. 30 (Matt Dark Green). When dry, this was given a coat of Klear, the panels and doors being picked out in the same colour and added later. To represent the varnished plywood remainder of the fuselage, I fell back on a technique from my model soldier days and I first painted the fuselage with a coat of Humbrol No.62 (Matt Leather) lightened with a little white. This was allowed to dry thoroughly, I then used an artist's oil colour, Windsor and Newton Mars Brown; this was well diluted with turpentine and using a large brush, it was painted all over the fuselage, then taking a piece of fine sponge, I wiped it all off again! In fact, it leaves enough paint behind to give the effect of wood grain.

This is one of those techniques where it can come exactly right the first time or you have to work at it so a little practice won't come amiss. I find the more you work at it the better. When I was satisfied, I put it to one side to dry and because it was well thinned with turps, this did not take long. There is of course another option when dealing with the fuselage and that is if you can get hold of a sheet of AeroMaster's Light Wood decal, this is very effective. The only real problem in the construction was in the alignment of the narrow chord wings. For some strange reason, I had difficulty lining them up yet instructions were followed

to the letter.
Decals

Once upon a time, I used to make a model and the last thing I would do would be to apply the decals, or transfers as we used to call them in ancient times, but now I find that early application of markings is not only essential but a time-consuming exercise. Lozenge decal in both upper and lower colours is supplied for the wings and tailplane as are the wing and tail rib tapes. These are supplied in strips, one part in the upper colour, the other in the lower, the idea being that after all the lozenge decals have been applied, the tape decal is applied and wrapped around the wing to cover both surfaces in one application. I found these difficult to apply, the very thin tape twisting and folding back on itself. I found a water-laden paint brush some help but some of the tapes broke up and with no spares, I had to spread the location of the tapes to the lower wings. I would have preferred the tapes to be in single colours with some spares. The National markings were perfect.

Decal Rating = 7/10

Accuracy

When dealing with experimental types the main difficulty normally faced is a lack of information. This was not to be the case, thanks to our friends at Albatros Productions with their special 'Albatros Experiments: The Foreign Fighters', this really fits the bill and a 1/48th scale drawing and photographs proved invaluable. Further research proved fruitless as all I was able to come up with were photos already published in the special. The model checked out very well against the drawing which may well have been a source of reference in the kit's manufacture.

Colour Options

Quite bluntly, there is no choice, as only one aircraft was ever built.

Conclusion

As an aficionado of Eduard kits I always welcome new models to their lists, but when it came to this one I had my doubts. Don't get me wrong, the mouldings are beautiful, the basic idea is very good, plus a great deal of expertise has been used to produce a very nice model, but why this particular aircraft? There are a host of operational types out there just crying out to be produced as a kit. I just mention a couple of manufacturers, i.e. Roland and IVG, most modellers would be able to provide a comprehensive list of what they would like to see. All in all I think this kit was good value and an interesting, if long, build. Well done Eduard, can we have some other types, please?

Thanks to Eduard M.A. for the review sample.

Rod Holland



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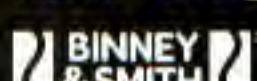
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Boeing 737-800

Technical Data

Manufacturer:	Revell®
Scale:	1/144th
Price:	£9.95
Kit No.	04238
Panel Lines:	Recessed ✓
Status:	New Tooling ✓
Type:	Injection Moulded Plastic
Parts:	Plastic 61 (White), Clear 3
Decal Options:	1
Manufacturer:	Revell AG
UK Distributor:	Revell® Binney & Smith (Europe) Ltd

The Kit

First impressions on opening the large box were excellent apart from the clear parts being in the same bag as the rest of the parts and the box being squashed in the middle by our glorious British Post Office. The kit has sixty parts moulded in soft white plastic with very nice recessed detail and three clear parts. Luckily the only damage from the Postman was one broken UHF aerial. The only option is gear down or up, though the instructions don't show how to do the main wheels, which are still visible when the gear is up. As usual nowadays there is no stand supplied, so you'll have to make your own if you want it posed in-flight.

Instructions

The instructions are in Revell's usual style of a booklet with a short history, parts diagram, and cover 22 stages of construction (with detail paint guidance) plus stage 23, which is a full painting/decal plan. All colour references are for Revell's own brand paints. Mixing ratios are given for some of the colours and I used mostly Humbrol equivalents on the model.

Construction

This starts with the fuselage, which went together very well and has a nicely detailed box for the nose gear bay, with pipes and cables moulded on its roof. The passenger

cabin windows are moulded open with no clear parts supplied for them, but you can use Clear Fix or Kristal Klear if you want them glazed. The cockpit roof and glazing is a single clear part, similar to the Minicraft airliner kits, but use Clear Fix or you'll probably damage the lower edge of the windows. I painted the inside black to prevent the empty tube look, as no interior fittings are included. It fits pretty well with only a little sanding needed on the top joint. Remember to add 20g of nose weight or it will sit on its tail. I usually add more than the specified weight just to make sure. The wings came next and are quite well detailed. The flaps are moulded solid with the top surfaces and have fine trailing edges but also slight sink marks on the flap area on the top and under-side. The lower wing is a one-piece moulding minus the flaps, to which are added the top surfaces and the main gear bay. This gear bay has to be centred perfectly or you'll have difficulty fitting the wings to the fuselage. The wings, when assembled, are very flexible (I thought they were warped at first) so make sure you line up the under-fuselage section correctly when attaching them to the body or you may have a gap on one side. I used fast setting EMA Plastic Weld for this, gluing small areas at a time and holding them in place until set. It takes a while but works and no filler was necessary. All of the flap actuator fairings (parts 25-30) had deep sink marks but were easily filled and sanded. The tailplanes are also one-piece mouldings but have no sink marks at all and very good detail.

The engines are built up in stages 4-9 and comprise seven parts each, including separate intake lips. Detail painting instructions are given but some don't seem right, like Light Olive for part of the hot gas section of the engines. I can't see this on any of the photos used for reference so I used Testors No. 1790 (Chrome Silver) for the hot turbine cowling toned down with a thin black wash. This

looked closer to the colour shown in a very good photo of Hapag-Lloyd's D-AHFE on page 52 of Airliner World's July 1999 issue. I used Humbrol's No.33 (Matt Black), dry brushed over the chrome silver, for the rear cone. The engines seem to tilt up too much at the front end when fitted but as I don't have a set of plans I can't check it. Also the nacelles look more like those from the 300/400/500 series; the 800s have more rounded lower intake lips and undersides. The pylon-to-wing joint needed a little filling and filing.

The landing gear components are very well detailed for 1/144th, probably the best I've seen in this scale. The nose gear is made up from seven parts, one of which I think needs reversing. Part 39, the nose gear actuator, should have the square beam section mounted to the roof of the nose gear bay and the rounded section glued to part 38. I tried a dry run the way the instructions show but it was obvious that it wouldn't fit without surgery and looked very odd.

The only problem with the main gear was locating part no 50 (gear actuator) onto the main gear leg. This fits behind the leg and not to the side of it as shown in the exploded view. There is a good photo of its placement on the side of the box. Remember that a lot of 737s have the smooth outer hubs of their main wheels painted the same colour as the aircraft's underside, in this case white. All the gear doors are over scale in thickness but look okay when fitted.

Accuracy

The real aircraft measures 129ft 6in long, 112ft 7in span and 41ft 2in high. The model, as near as I could measure, scales spot on in length, 113ft in span and 42 ft high. Very acceptable in this scale. After completing the kit I noticed that the wing tip lights were inaccurate in shape and would benefit from filling and rescribing.

Colour Options

Only one scheme is supplied, for Hapag-Lloyd

of Germany, with an option of two registrations (D-AHFD & G). There does appear to be an error in the colour plans where it tells you to paint the lower fuselage and engine nacelles light grey as used on Hapag-Lloyd's earlier aircraft. Every photo I could find shows this as white on the 737-800s, the same as the upper fuselage (including the kit box photos of the real aircraft). Revell suggest a 40%-60% mix of Gloss Orange and Lufthansa Yellow for the tail colour but I took the easy way out and bought a tin of Xtracolor X332 (Hapag-Lloyd Orange).

Decals

Decals used to be the Achilles heel of Revell's kits but these are excellent, very thin with minimal carrier film. They went on very well indeed, with no silvering, and are the best Revell decals I've ever used. One slight problem was the starboard forward cheat line had the dark blue a little wider than on the rear section. Luckily it is not noticeable. The sheet is pretty comprehensive with sixty-five pieces, some of which aren't used.

Decal Rating = 9/10.

Conclusion & Recommendation

This is a really nice kit, even with the faults noted, of an increasingly numerous type, and was very enjoyable to build. It's a pity there is only one colour scheme but I'm sure it will be re-released in other colours soon. The independent decal companies have already started releasing some new sheets for the 800 series. Conversion to the shorter -600 & -700 versions will be easy, as all of the new generation differ in fuselage length and engine power rating only.

For the -900, which is due to fly in August 2000, you'll need to add 8ft 8in to the fuselage length. Highly recommended.

My thanks to Revell, Binney & Smith (Europe) Ltd. for the review sample.

Paul R. Harrison





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There are now six ranges of books published by a pub. This series featuring Russian post war aircraft will continue to expand, the next title will probably be 'MiG-19'. Under the new house name of Mark 1, the first title has now been published, *Wesland Wester*, £7.50 plus P&P.

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Figure 1. A composite of several 10-min frames taken at random.



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Fiat Cr.32 quarter A.S.

Technical Data

Scale:	1/72nd
Price:	£25.00
Kit No.:	MV-06
Panel Lines:	Recessed ✓
Status:	New Tooling ✓
Type:	Resin, Etched Brass & Vac-formed Clear Plastic
Parts:	Resin 50, Etched 31, Clear 2
Decal Options:	None
Manufacturer:	Museum
Obtain via:	MisterKit

The Kit

The plain cardboard box with austere label with a line drawing of the CR.32 and stern warning 'Caveat Emptor' (buyer beware!), does not prepare the modeller for the contents carefully packed in polythene bags inside. The etched parts are of the first quality and the flying surfaces and fuselage parts are the finest examples of resin casting I have seen to date. The conventionally split fuselage halves are strong yet wafer thin with as much delicacy shown in the moulding of the plain interior as with the finely detailed exterior. Having said this the struts and some ancillary resin parts show far less refinement indicating that the master mould maker's skill exceeds the capacity of the resin medium used for casting. Decals are not included - hence the box top warning mentioned above.

Instructions

Six sides of A5 size give a fine line drawing of the complete aircraft, history in Italian and English, hazard warnings for resin working, four sides of exploded construction diagrams, data block complete with front elevation, Italian bibliography and one side showing camouflage and decal details. Tauri Model decal sheets 72-521 and 72-522 are recommended for finishing the model as M.M. 4666 a Fiat CR.32 quarter A.S of the 50° Stormo operational in Libya in 1940. The bibliography also refers to a CD-ROM #1, which is available from Mister Kit at a price of £13 plus postage.

Construction

The building sequence used began with the etched cockpit, which after painting is installed in the fuselage. With the fuselage closed up the lower wings were attached together with the fixed tail surfaces. The instructions clearly imply that the undercarriage is installed next, but I chose to paint and decal the model before attaching the upper wing, then the undercarriage and the remaining fittings.

The detailed cockpit goes together well although the location of the rudder pedals and joy-stick is not clearly defined in the paperwork supplied. This may be where the CD-ROM comes into its own. The wafer thin resin seat had damaged edges and since repair was not possible a replacement was made by pulling heated plastic sheet (0.010") over a suitably shaped balsa former. The fuselage is so thin walled that it's not advisable to scrape resin away to close both halves over the cockpit, but it was relatively easy to file a fraction of brass from the top of

the cockpit coaming to achieve a snug fit. Once installed there is little to see of the great cockpit detail and the model cries out for selective panel opening (given the availability of accurate references).

The lower wings are supposed to be butt jointed to the fuselage, but it seemed prudent to drill and peg them for added security. Butt jointing the fixed tail feathers was straightforward.

Painting and decaling are dealt with in the 'colour options' section below. It's relevant to note at this stage that the resin casts were full of tiny bubbles and the slightest sanding results in a rash of pinholes, which have to be stopped up with a fine Milliput paste.

The resin inter-plane struts are very flexible, fiddly, hard to clean up and very prone to surface bubbles, and therefore, brass Strutz was substituted. Lengths of appropriate size were fitted into sockets created by drilling angled holes into the wings at the marked locations. (It might have been possible to drill the resin struts and wings at the strut locations to accept thin wire, but this was beyond my skill and patience!).

I used a combination of a 1/48th scale plan in a magazine 'shrunken' on a photocopier and the original resin items to construct a plasticard gauge to set the front

Warren struts to complete the assembly.

Whilst the end result is neat the keen eyed will note that the conspicuous cuffs at top and bottom of the struts is missing. Given time all twenty-four can be replicated with thin foil or decal cut to size.

The main undercarriage struts suffer the same strength and bubble problems as the struts and the same remedy, substituting lengths of brass Strutz filed to shape, was applied. After the undercarriage the propeller, machine gun blast tubes, instrument venturi, gun sight, foot step, windscreen, control surfaces, tail bracing and mainplane rigging were added to complete the model.

Colour Options

Museum suggest a WWII scheme, but virtually any standard version of the CR.32 may be made from this model subject to access to data on the minor modifications required with decals supplied from the aftermarket. I airbrushed the excellent AeroMaster colours (1216) Tan 4 Gallio Mimetic and (1210) Grey 1 Grigio Mimetic and brush stippled (1212) Green Verde Mimetic over the Tan.

The kit instruction sheet, each of the Tauri instruction sheets and an illustration in David Mondey's 'The concise guide to Axis Aircraft of World War II', which separately depict M.M. 4666 in its 1940 Libyan guise show the aircraft identifier 16010 in slightly different proportions and location on the

absolute maximum five scale inches short on length and span, which are quoted as 24 feet 5.25 inches and 31 feet 2 inches respectively. Thus the dimensional deficiency may be down to my accuracy in measurement. Certainly the proportions look spot on.

Any concerns over the finish may be resolved by good research prior to construction.

Decals

I used Tauri Model decal sheet 72-521 for finishing my model as M.M. 4666, a Fiat CR.32 quarter A.S of the 50° Stormo operational in Libya in 1940 suggested in the instructions.

Not strictly part of the kit the decals were of high quality good density, glossy, acceptably thin, in good register, conformed well and tolerant of Micro Sol products.

Conclusion and Recommendation

There is no doubt in my mind that the flying surfaces and fuselage are masterpieces of the mould maker's and resin caster's art fully doing justice to Ing. Celestino Rosatelli's attractive lantern-jawed dogfighter, which first flew in 1933.

Museum's CR.32 is the sort of kit I buy and look at every few months to marvel at and to dream of making one day, when I might consider myself good enough. It was for this reason that I found construction a



cabane struts in pre-drilled holes in the fuselage and repeated the process for the rear struts. The top wing was offered up to the cabane and adjustments made by comparison with the plans and an alignment grid until a satisfactory result was achieved. Working with brass, superglue and wafer thin resin should have been a recipe for disaster and so there was considerable tension throughout the build, but it worked surprisingly well for me. The top wing was then super glued in place and left to cure, before the cabane diagonal struts were installed and the eight other

fuselage. The Museum drawing and the book clearly show the '10' as a different colour (red) to the 160 (black) whilst Tauri has all of the numbers in black.

In addition the kit instructions infer a light brush stippling of the green mottle, whilst the other sources show much denser blotches.

Lacking a definitive photo reference I went with the light brush stipple and the all black codes.

Accuracy

I believe this kit to be very accurate, with an

white knuckle ride from start to finish, but it was a privilege to be asked to review it, it was an absolute joy to complete and highly recommended to modellers confident in their skills.

There are downsides relating to the smaller resin parts, but all that said this is a fantastic kit and I look forward, avidly, to future releases from Museum.

My thanks to Mister Kit for the review sample.

Simon Snape

Lublin XIIIter

Technical Data

Manufacturer:	AeroPlast
Scale:	1/72nd
Price:	£4.95
Panel Lines:	Recessed ✓
Status:	New Tooling ✓
Type:	Injection Moulded Plastic
Parts:	Plastic 60
Decal Options:	2
Obtain in UK via:	PoI Models



The Kit

The rather large box contains just two grey sprues, an A4 instruction sheet and a small decal sheet.

Instructions

These give a ten-stage assembly guide with exploded diagrams, two black and white side views and a plan view with colours given as Humbrol references.

Construction

All goes well until you hit stage six which is the construction of the wing.

supporting struts. These are split lengthways down the middle, so need to be joined together. Not my idea of fun. The propeller spinner is also split down the middle as are the float struts and machine gun. Hold on, I thought I built models for enjoyment, but this is taking the Mickey! I decided to look carefully at what was on offer here. The engine and cowling are cast as one unit which is pretty poorly defined. The seats, if built up full size, would resemble those slip-down seats you see at bus shelters and the floats have engraved panel lines that are far too deep. By this stage, I had lost all of my initial enthusiasm for the model and as a result the construction plodded along. I must admit to leaving a few parts off because I just couldn't be bothered with them; life is too short!

Colour Schemes

Two versions are offered, both of which are in an identical scheme. They are both Medium Grey (126) overall with Silver (11) cowling, front fuselage, wing undersides, floats and struts.

Decals

These are nicely printed but,

unfortunately, wouldn't stay on the model and I therefore had to use matt varnish to stick them down!

Decal Rating = 0/10

Accuracy

Actual wing span of the real thing is 13.3m, while the model scales out to 12.96m. The actual length was 9.13m, while the model is 9.36m. So overall not bad, but the finished model looks too toy-like due to the lack of definition and detail.

Conclusions and Recommendations

I was really pleased to get this kit as I had purchased an old Profile of the aircraft a few months previously. However, soon after construction had started I realised all was not as rosy as I would have liked. Unless you really want a model of this type (and it is a very attractive aircraft) leave well along, it's just too clumsy and the details aren't very well defined. If you just want to use the bare bones for a scratch-building project then you will cope with its shortcomings, but overall I have to say that I cannot recommend this kit.

My thanks to PoI Models for the review sample.

Lee Thomson

Payen PA.22 Flechair

Technical Data

Scale:	1/72nd
Price:	£TBA
Kit No.:	D10
Panel Lines:	Recessed ✓
Status:	New Tooling ✓
Type:	Limited-run injection moulded Plastic, White Metal & Vac-formed Clear
Parts:	Plastic 16 (Blue), Metal 3, Vac-form Clear 1
Decal Options:	1 (in three different schemes)
Manufacturer:	Model-Aire International

The Kit

Contained in a flimsy card box with a plain monochrome illustration and text, the kit is supplied in a blue familiar to builders of High Planes kits, who were responsible for the moulding. The moulds have led a complex life before being used, as they were originally constructed 15 plus years ago. They show some signs of their years by being slightly short-shot although flash is minimal. A small sprue is included which replaces the offset wheels with two-piece mouldings but these are only slightly better. The engraved panel lines are well done and a vac form canopy is supplied which is commendably clear. A small trio of metal parts is also included which consists of landing gear struts and tailwheel. All are supplied in segregated bags to avoid damage.

Instructions

The information supplied consists of a full description of both the subject and the kit with three alternative colour schemes from its racing colours to a captured and modified version outside the scope of the kit without some surgery. No exploded views or build instructions are enclosed but six useful photos are printed on the last page.

Construction

Part breakdown is traditional and

assembly will be easy for those with a few injection kits behind them; preparation however is essential as the sprue attachments are large, and flash although minimal is present in awkward places, entailing careful work with a scalpel and needle file to avoid altering such delicate profiles as the prop blades. Cockpit detail is spurious as no information remains and this is made up of a poorly fitting floor and bulkhead plus a seat and instrument panel.

There is scope here for superdetailing as the canopy opens in a clamshell pattern. The faired-in canopy is very clear although the fit



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is a challenge to achieve and interior detail when closed is obscured by a birdcage of framework. A small degree of filling is needed especially on the wing roots, all four of them! The extra sprue with the two-part wheels is of questionable value as the original ones despite some vagueness of shape and the aforementioned offset were usable.

Accuracy

Length is a scale 5 inches short and span is 4 inches under but the overall look is

not affected by this little error.

Painting/Decals

The original racing scheme was a rich blue common to the entrants in the cancelled Coupe Deutsch de la Meurthe race but after capture the plane was repainted in the standard RLM65/71 blue/green and this is how I chose to display the model.

The decals are beautifully in register with a satin finish but sadly the instructions admit to a few mistakes

although only one of these turned out to be there, strange. The dull scheme is enlivened by these superb decals from GR in Australia and a red spinner accentuates this.

Decal Rating = 9/10 (it would be 10 but the Flechair logo should be black not white).

Conclusion and Recommendations

Being an injection kit I think that many modellers will be tempted by this offering

especially if the price is right but be warned, the parts require preparation and the fit is only marginal.

The Dujin resin version is no more difficult despite the need for cyanoacrylates, although the cost no doubt would be higher.

In conclusion I can recommend this kit to most modellers with the usual reservations.

My thanks to MAI for the review sample.

Liz Mumford

Martin Baker M.B.5

Technical Data

Scale: 1/72nd
Price: £16.25 + P&P
Kit No.: 6372
Panel Liner: Recessed ✓
Status: New Tooling ✓
Type: Resin, White Metal & Vac-formed Clear
Parts: 14 Resin, 18 Metal, Clear 2
Decal Options: 1 (Prototype)
Manufacturer: Magna Models

The Kit

Contained in a stout card box with foam lined, pullout drawer containing the parts; Magna instantly impressed me with their presentation. A spare canopy is provided and resin, metal and transparent parts are bagged separately to avoid damage. The resin parts are well moulded with easily removed pouring gates but the metal parts showed considerable pitting which marred the otherwise fine detail.

Instructions

The information supplied consists of a short type history, the usual advice on preparation and handling of resin parts and a brief accompaniment to the exploded views and paint instructions. References are quoted and a breakdown of parts is included but paints are only given as descriptive names, not number references, which may cause problems to some.

Construction

The breakdown is conventional, familiar to those who cut their teeth on 'Airfix' Series 1 and many generations since but the lack of absolutely positive location points may cause problems to the builder new to resin. Parts fit, once clean up has been completed, is better than most with little filler needed. The superb one-piece interior, although my example had a poorly moulded seat back, is a high point of the build and will give much

satisfaction to those to whom a washed and dry-brushed cockpit is a must. The fuselage halves are a perfect match but the underslung intake was a poor fit with the complex shape surrounding it a nightmare to fill and re-profile. Flying surfaces fitted easily and the spinner finished up the major parts a treat. The transparency is supplied with a spare, which was not needed this time but certainly supplied a feeling of security during the matching process. The join to the fuselage proved to be a time consuming effort with much trial fitting required but was straightforward nonetheless.

After basic painting the detail parts were fitted with the pre-painted exhausts slipping into their slots easily and resulting in a realistic and easily achieved look. The landing gear with its resin wheels also fitted together easily with only the pitting of the metal surface marring the effect. The tiny tailwheel doors require careful pruning to

remove the metal flash and adjust them to the tailwheel-well aperture but again the final look is worth the care taken. The six prop blades slot nicely into their sockets on the spinner which is just as well because they require much adjustment to get the look just right; best to use epoxy here to give you time for fiddling. Again the fitting required some filler and the metal flash needed a steady hand to avoid marring the blade profile.

The wing underside pitot tube is supplied as a metal moulding and looks the part with a bit of judicious thinning with a scalpel blade. A whip aerial of fine wire was cut to the indicated length and fitted behind the canopy, et voilà!

Accuracy

I measured my finished model as a scale 2in short in span and 3in short in length, which is very accurate for 1/72nd scale especially as my over-zealous preparation work may be responsible for those missing few thou of resin.



Painting

The only variation in the schemes shown is the option of a black or polished spinner. I chose the black as the easy option but the expert application of bare-metal foil would make this kit really stand out. The scheme is a typical grey/green camouflage with yellow undersides. I failed to notice that the top colours wrap around the leading edge until it was too late.

Decals

The decals supplied are suitable for the only example built and comprise roundels and tail flash with the obligatory prototype 'P' and codes. They are satin and commendably thin with good colour density but one of the fuselage roundels lacks its white and therefore had to be replaced from the spares box. Application was trouble free and adhesion and contour following was good.

Decal Rating = 9/10.

Conclusion and Recommendations

It is probably clear from the above that I found this an enjoyable and relatively straightforward build. It is no 'shake the box' kit but would be a good choice for the first time resin builder or younger modeller looking for something different. I found myself smiling at the elegant way some of the parts were engineered to fit and only had a few frustrating moments. In the hands of an experienced modeller with the patience I lack this could be a real winner. Recommended to all modellers.

As an aside it is nice for the ranks of Luftwaffe 46 kits to have a worthy adversary in the dogfights of our imagination and wouldn't it have gone down a storm at Reno.

My thanks to Magna Models for the review sample, how about the M.B.6 jet project next?

Liz Mumford



Thank You

Scale Aviation Modeller International would like to thank Revell, Birney & Smith (Europe) Ltd for the generous supply of paints and accessories from their extensive range for use by the review team throughout 1999.



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Ekranojan A-90 Orlyonok	£12.99
Boeing 737-800 KLM	£10.99

ACADEMY 1/48 scale [ex Canadian Hobbycraft]

P-26A/C Peashooter	£10.99
P-36A Hawk	£10.99
Savitsky P-35A Fighter	£10.99

MAGNA MODELS 1/72 scale

Fairchild C-123B/UC-123B/ HC-123B/C-123K	£69.75
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AIRFIX 1/72 scale

Apollo Lunar Module	£5.99
Henschel HS-123A-1	£3.99

AIRFIX 1/144 scale

Space Shuttle	£24.99
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SAM PUBLICATIONS

Camouflage & Markings:- RAF Fighters	
1945-1950 UK Based	£14.95

SAMI PUBLICATIONS

The Supermarine Spitfire Pt.1	
Merlin Powered	£17.99

SQUADRON SIGNAL PUBLICATIONS

Fiat CR.32/42 in Action	£6.99
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DETAIL AND SCALE PUBLICATIONS

B-24 Liberator	£10.95
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MONOGRAM PROMODELLER 1/48 scale

Focke Wulf TA-154 A-O Moskito	£24.95
Messerschmitt ME-110G-4	£14.95

REVELL 1/144 scale

Boeing 737-800 Hapag Lloyd	£9.95
Airbus 321 Lufthansa	£9.95
Boeing 747-400 United Airlines	£15.95

REVELL 1/32 scale

F-15D/E Eagle	£24.95
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MINICRAFT 1/144 scale

USAF C-32A[B-757]	£9.99
C-118 The Independence	£9.99

REVELL 1/72 scale

P-47M Thunderbolt	£2.95
Boeing Vertol H-21 Heer	£8.95

TAMIYA 1/48 scale

Bristol Beaufighter TF.Mk.X	£18.99
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PEGASUS 1/72 scale

Airco DH-2	£11.99
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WELSH MODELS VACUFORMS 1/144 scale

Douglas DC-7C BOAC Blue tail	£17.99
Bristol Britannia 312 BOAC Blue Tail	£14.99
Canadair DC-4M2 Argonaut	
BOAC Blue Tail	£13.99
Boeing 720-027 Braniff	£22.00
Super VC-10 BOAC	£22.99
C-133 Cargomaster USAF	£30.00

WELSH MODELS SKYLINE DECALS 1/144 scale

No.7 BOAC Blue Tail DC-7C and	
Canadair C-4	£6.25
No.8 BOAC Blue Tail Britannia 102/312	£6.25
No.9 BOAC Blue Tail Super	
VC-10/Standard VC-10	£8.25

SKYLINE 1/144th scale

Boeing 737-300 (also contains parts for the	
400/500 versions and also	£10.99

HIKOKI PUBLICATIONS

Shadows - Airlift and Airwar	
In Biafra and Nigeria 1967-1970	£29.95

HARPER COLLINS PUBLICATIONS

Airfix Celebrating 50 Years of	</

Eduard Model Accessories

1/72nd Scale

Subject: Ki-67 Hiryu

Scale: 1/72nd

Product No.: 72-321

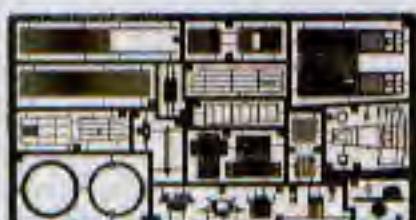
Type: Detail Set

Designed for: Hasegawa kit

Parts: Etched Brass 233, Acetate 4

Price: £TBA

Includes: This four-fret set offers rudder pedals, radio equipment, seat harness, instrument panel, throttle box, bracing for the glazed nose, ammo boxes, ammo belts, gun ring, gun barrels and rear machine gun mounting.



Subject: DH Mosquito FB Mk VI/NF Mk II

Scale: 1/72nd

Product No.: SS122

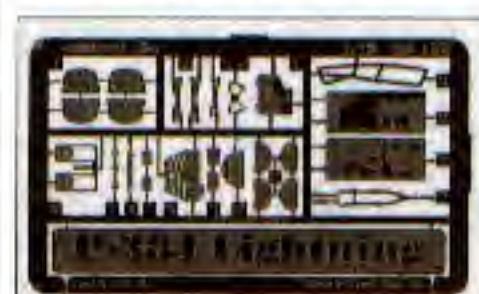
Type: Detail Set

Designed for: Tamiya kit

Parts: Etched Brass 28, Acetate 1

Price: £TBA

Includes: This four-fret set offers a new instrument panel, seat belts, radiator matrix, map case, radio frequency selector, ice guards, trailing aerial fairlead and downward ident lamps.



SS122 (Hasegawa)

Subject: DH Mosquito FB Mk VI/NF Mk II

Scale: 1/72nd

Product No.: SS137

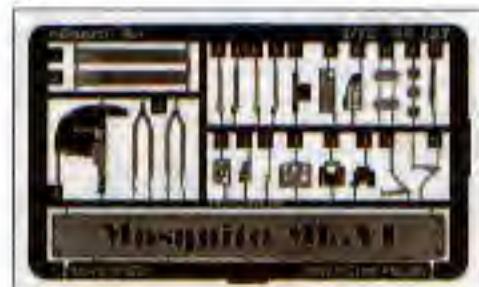
Type: Detail Set

Designed for: Tamiya kit

Parts: Etched Brass 27, Acetate 4

Price: £TBA

Includes: This set offers a new instrument panel, seat belts, radiator matrix, map case, radio frequency selector, ice guards, trailing aerial fairlead and downward ident lamps.



SS137 (Tamiya)

1/48th Scale

Subject: Messerschmitt Bf 109G-10

Scale: 1/48th

Product No.: 48-310

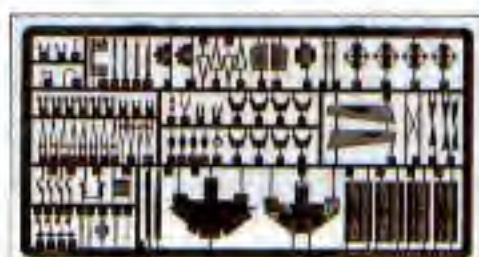
Type: Detail Set

Designed for: Hasegawa kit

Parts: Etched Brass 99, Acetate 4

Price: £TBA

Includes: Sidewalls, trim wheel, throttle box, seat harness, rudder pedals, instrument panel, rear bulkhead, oil cooler matrix, exhaust glare guard, Morane mast, rudder linkage, undercarriage wheel well inserts and radiator matrix and flaps.



Subject: F-117 Nighthawk

Scale: 1/48th

Product No.: 48-313

Type: Detail Set

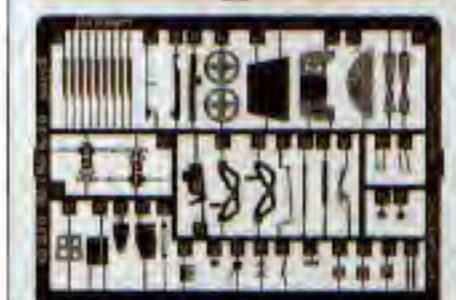
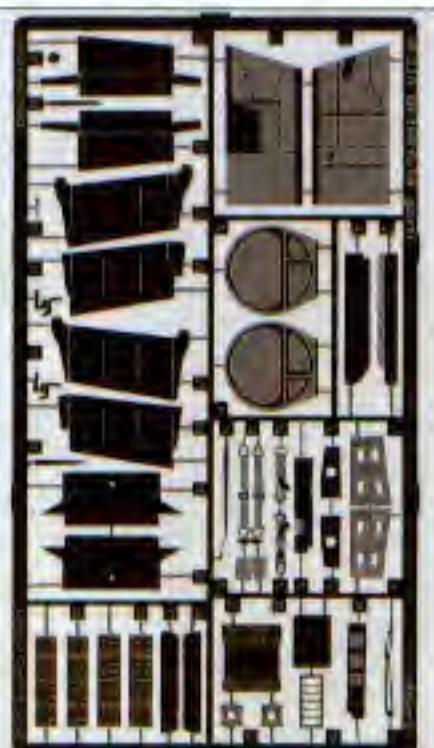
Designed for: Revell-Monogram kit

Parts: Etched Brass 113, Acetate 1

Price: £TBA

Includes: In this set you get a set of seat belts,

ejection seat firing handle, side console and sidewall details, rudder pedals, instrument panels, canopy locks, weapon tray details, undercarriage compression links and main and nose wheel undercarriage door links.



48-313 (Revell-Monogram)

'Zoom' Series

Subject: Gloster Meteor Mk I

Scale: 1/48th

Product No.: FE116

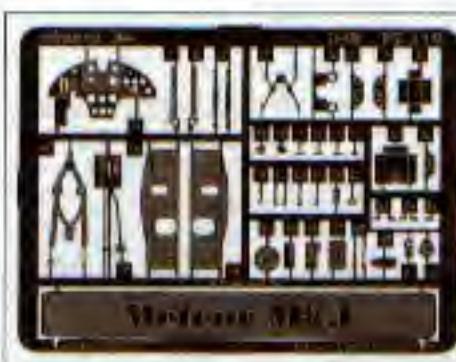
Type: Detail Set

Designed for: Tamiya kit

Parts: Etched Brass 44, Acetate 3

Price: £TBA

Includes: This final set offers a new instrument panel, sidewall details, throttle box, seat harness, wheel well inserts and nose wheel well rib.



FE116 (Tamiya)

Conclusion

As with all Eduard sets, the above are of excellent quality and can be recommended to modellers with experience of etched brass. The 'Zoom' series sets also offer a good starting point for any of you not experienced in this medium.

Our thanks to Eduard M.A. for the review samples.

News

Note: All of the items listed have recently been released and are here for our readers' information. Full reviews of each will appear next month.

Aeroclub

1/48th Scale

V185 - Jet Provost/Strikemaster Weapons Set (Aeroclub) (£TBA) [m/wm]

Cutting Edge

1/48th Scale

CCE48169 - MiG-3 Cockpit (ICM) (£12.95) [r]

Teknics

1/72nd Scale

TK72012 - Pratt & Whitney R-2800 Engine (N/A) (£9.95) [r/eb]

Flightpath

1/72nd Scale

MC-130E Clamp Combat Talon I conversion (Italeri) (£12.90) [r/wm]

C-130 Allison T6-A-15 Engines (Italeri) (£9.90) [r]

MC-130H Combat talon II conversion (Italeri) (£19.90) [r/wm/eb]

G-130E-1, HC-130H & HC-130P conversion (Italeri) (£9.90) [r/wm/vf]

G-130 Inflight Refuelling Pods (Italeri) (£10.90) [v]

C-130 Hercules Detail Set (Italeri) (£14.90) [eb]

Avro Vulcan B Mk 2 Detail Set (Airfix) (£9.90) [wm/eb]

Bristol Beaufighter Detail & Weapons Set (Hasegawa) (£16.90) [r/wm/eb/ac]

Bristol Beaufighter ZF Mk 10 Detail & Conversion Set (Hasegawa) (£16.90) [r/wm/eb/ac/dc]

Avro Vulcan B Mk 2K Tanker Detail Set (Airfix) (£10.90) [wm/eb]

LC-130F Hercules Ski and Fittings Set (Italeri) (£14.90) [r/wm/eb]

Avro Vulcan B Mk 1 and B Mk 1A Detail and Conversion Set (Airfix) (£22.90) [r/wm/eb]

1/32nd Scale
F-4E/F/G Airframe Set (Revell®) (£19.90) [eb/wm]

NOTE

Items shown in parenthesis () indicate the manufacturer of the intended suitable/donor kit, while those in { } are the known price and those in [] indicate the medium used as listed below

Key:

ac = Acetate

dec = Decals

eb = Etched Brass (or Steel)

gl = Glass

in = Injection Moulded Plastic

r = Resin

vf = Vac-formed Plastic (or Clear)

wm = White Metal (or Pewter)

'Zoom' Series

Subject: P-38J Lightning

Scale: 1/72nd

Product No.: SS122

Type: Detail Set

Designed for: Revell-Monogram kit

Parts: Etched Brass 28, Acetate 1

Price: £TBA

Includes: In this set you get a set of seat belts,

72-325 (Hasegawa)

Accessories

Airwaves

Quite a lot of new accessory sets from Airwaves this month, many of which are centred around the Supermarine Spitfire.

1/72nd Scale

Subject: Douglas TBD Devastator

Scale: 1/72nd

Product No.: AC72-209

Type: Detail Set

Designed for: Airfix kit

Parts: Etched Brass 27

Price: £TBA

Includes: A complete new cockpit and rear gunner's compartment, bulkheads, instrument panel, sight, seat harness, rudder pedals, DF loop, gun ring and wing fold mechanism.



AC72-209 (Devastator)

1/48th Scale

Subject: Douglas TBD Devastator

Scale: 1/48th

Product No.: AC48-097

Type: Detail Set

Designed for: Revell-Monogram kit

Parts: Etched Brass

Price: £TBA

Includes: Wing fold mechanism, wheel wells, machine gun amino box, torpedo propeller, oil cooler, pitot, machine gun ring and torpedo sight.



AC48-097 (Devastator)

Subject: Spitfire PR Mk 1C Type 1

Scale: 1/48th

Product No.: SC48-037

Type: Conversion

Designed for: Tamiya kit

Parts: Resin 7, Vac-formed Clear

Price: £TBA

Includes: Internal fuel cell, camera sight, engine cowling intake, fuselage mounted camera, fuel blister (port) and camera blister (starboard) in resin and a vac-formed canopy.



SC48-037 (Spitfire PR Mk 1C Type 1)

Subject: Spitfire PR Mk 1C Type 2

Scale: 1/48th

Product No.: SC48-038

Type: Conversion

Designed for: Tamiya kit

Parts: Resin 7, Vac-formed Clear

Price: £TBA

Includes: This set is identical to the previous one, although it offers a deep chin cowling.



SC48-038 (Spitfire PR Mk 1C Type 2)

Subject: Spitfire PR Mk 1F

Scale: 1/48th

Product No.: SC48-039

Type: Conversion

Designed for: Tamiya kit

Parts: Resin 9, Vac-formed Clear

Price: £TBA

Includes: This set is similar to the previous two with a fuselage fuel cell, camera sight, deep chin cowling, engine cowling intake, ventral fuselage ports and the fuel blister under the port wing. A vac-formed replacement PR canopy is also included.



SC48-039 (Spitfire PR Mk 1F)

Subject: Spitfire Mk IX Rudder

Scale: 1/48th

Product No.: SC48-045

Type: Conversion

Designed for: Any Mk IX kit

Parts: Resin 1

Price: £TBA

Includes: This set contains a broad chord 'pointed' rudder fitted to the Mk VIII and later variants of the Spitfire.



SC48-045 (Spitfire Mk IX Rudder)

Subject: Spitfire Plain Hub Wheels & Undercarriage Legs

Scale: 1/48th

Product No.: SC48-047

Type: Accessory

Designed for: Any Spitfire kit

Parts: White Metal 5

Price: £TBA

Includes: This set comprises two oleo legs and wheels with plain hubs, along with a complete tailwheel unit.



SC48-047 (Spitfire Plain Hub Wheels & Undercarriage Legs)

Subject: Spitfire PR Mk X

Scale: 1/48th

Product No.: SC48-050

Type: Conversion

Designed for: Ocidental kit

Parts: Resin 18, Vac-formed Clear

Price: £15.25

Includes: In this set you get the deep chin cowling, oblique camera ports, retractable tailwheel, pressurised cockpit intake, Cofman starter bulge, ventral camera ports, camera blister (starboard), fuel pump blisters and Beam Approach 'Boat' antenna. The set also includes a replacement vac-formed canopy and white metal six-stack exhausts.



SC48-050 (Spitfire PR Mk X)

Subject: Spitfire PR Mk XI

Scale: 1/48th

Product No.: SC48-051

Type: Conversion

Designed for: Ocidental kit

Parts: Resin 17, Vac-formed Clear

Price: £15.25

Includes: This set is identical in content to the previous one, although the cockpit blower intake is not included.



SC48-051 (Spitfire PR Mk XI)

Subject: Spitfire Mk I to V D.H. 3-Blade Propeller and Spinner

Scale: 1/48th

Product No.: SC48-052

Type: Accessory

Designed for: Any Spitfire kit

Parts: White Metal 5

Price: £TBA

Includes: This is just a replacement D.H. propeller unit and comprises three separate blades along with a backplate and a spinner.



SC48-052 (Spitfire Mk I to V D.H. 3-Blade Propeller and Spinner)

Subject: Spitfire Gull Wing Section

Scale: 1/48th

Product No.: SC48-059

Type: Accessory/Correction

Designed for: Airfix, Arii or Otaki kits

Parts: Resin 1

Price: £TBA

Includes: This set offers a single resin piece that will induce the correct profile of the lower wing surface on the Arii/Otaki kit. As this kit is due back from Airfix this year, the product can also be used there as well, and Airwaves have cleverly moulded this piece so that it fits within the fuselage and kicks against it.

Subject: Spitfire Mk V 'C' Wing

Scale: 1/48th

Product No.: SC48-060

Type: Conversion

Designed for: Tamiya kit

Parts: Resin 12

Price: £16.99

Includes: The fact that Tamiya never offered their Mk V as a 'VC' has always annoyed many, so this new set will overcome this. It consists of two new resin wings along with a selection of blisters for the cannon and machine gun bays.



SC48-059 (Spitfire Gull Wing Section)

These wings will fit directly into the Tamiya kit and both standard and clipped wing tips can be installed.

Subject: Spitfire PR Mk 1G
Scale: 1/48th
Product No.: SC48-067
Type: Conversion
Designed for: Tamiya kit
Parts: Resin 6, Vac-formed Clear 1
Price: £8.99
Includes: Fuselage fuel cell, ventral camera ports, oblique camera port (bulged) and Mk V



SC48-060 (Spitfire Mk V 'C' Wing)

oil cooler. The set also offers a replacement PR style canopy.

Subject: Spitfire Mk V Oil Cooler

Scale: 1/48th

Product No.: SC48-068

Type: Accessory

Designed for: Any Spitfire kit

Parts: Resin 1

Price: ETBA

Includes: One of the bits required to make a number of Spitfire versions is the Mk V style oil cooler which is circular in cross-section unlike the earlier style that is a 'D' section. This



SC48-067 (Spitfire PR Mk 1G)

therefore offers that later style of cooler as a simple replacement part in resin.

Conclusion:

Each of these products has been well researched and produced. With a combination of these and Aeroclub sets, just about every Spitfire version can now be made, and with MDC's Seafire sets there are only the two-seat versions outstanding. Each of these sets can be recommended, and although the combined price of them and the base kit is high in some cases, I am sure all Spitfire fans will want to add these options to their collections. For those



SC48-068 (Spitfire Mk V Oil Cooler)

attempting the later PR versions that are based on the Mk IX, I would opt for the Tamiya Mk V converted to Mk IX with the Aeroclub parts, as the Occidental kit is woefully inaccurate.

Our thanks to Airwaves for the review samples.

Aeroclub

There are quite a few new items this month from Aeroclub, and they all relate to the Supermarine Spitfire.

1/48th Scale

Subject: Spitfire Mk IX
Scale: 1/48th
Product No.: V188A
Type: Correction/Conversion
Designed for: Occidental Kit
Parts: Injection Moulded Plastic 4, White Metal 9
Price: £7.50

Includes: This set 'corrects' the nose contour errors of the Occidental kit, as well as offering a four blade propeller, short carburettor intake, fixed tail-wheel and six-stack exhausts. If you combine this set with the later tailplanes, radiators and carburettor intake offered in V190, you can use this set on a Tamiya Mk V, but you will also have to remove the kit's 'B' wing and either install the Airwaves 'C' wing (to make a Mk IXc), or install the Occidental Mk IXa wing.



V188A (Spitfire Mk IX)

Subject: Spitfire Mk IX & XVI
Scale: 1/48th
Product No.: V188B
Type: Correction/Conversion
Designed for: Occidental Kit
Parts: Injection Moulded Plastic 6, White Metal

10, Vac-formed Clear 1

Price: £7.50

Includes: This set is similar to the previous one, but also offers the cut-down dorsal spine and broad chord rudder. On top of this there is the head armour and turn-over frame, plus clipped wing tips offered in white metal and a 'bubble' canopy in vac-formed plastic. Once again this set can be used on the Occidental kit, but considering its inaccuracies, the Tamiya Mk V can be converted with set V190 first, then with this set to make a late Mk IX or Mk XVI.

Subject: Spitfire Gull Wing Section

Scale: 1/48th

Product No.: V189

Type: Accessory/Correction

Designed for: Airfix, Arii or Otaki kits

Parts: Injection Moulded Plastic 1

Price: £1.40

Includes: This is a simple little insert to correct the 'missing' gull wing section of the Arii/Otaki



Mk VIII kit, which will soon be reissued by Airfix.

Subject: Spitfire Mk IX Tailplanes & Radiators

Scale: 1/48th

Product No.: V190

Type: Correction/Conversion

Designed for: Tamiya kit

Parts: Injection Moulded Plastic 5, White Metal 4

Price: £2.30

Includes: This set will allow you to update a Tamiya Mk V into a Mk VIII or later, with the

addition of the later style of tailplanes (with enlarged counter weights), larger radiators and matrix, and an insert to fill in the area below the nose on the leading edge of the wing where the later style of carburettor intake is installed.

Subject: Spitfire Retractable Tailwheel

Scale: 1/48th

Product No.: V191

Type: Correction/Conversion

Designed for: Kit

Parts: White Metal 4

Price: £1.40

Includes: In this set you get a new tailwheel leg and wheel, doors and internal insert to allow you to

modify a fixed tailwheel kit into a retractable one.

Subject: Spitfire Undercarriage Legs

Scale: 1/48th

Product No.: V192

Type: Correction/Conversion

Designed for: Kit

Parts: White Metal 8

Price: £1.80

Includes: These later style oleo legs are the spined type with compression links and also offer both four and five spoke wheel hubs.

Subject: Spitfire Mk IX/XVI Pointed Rudder

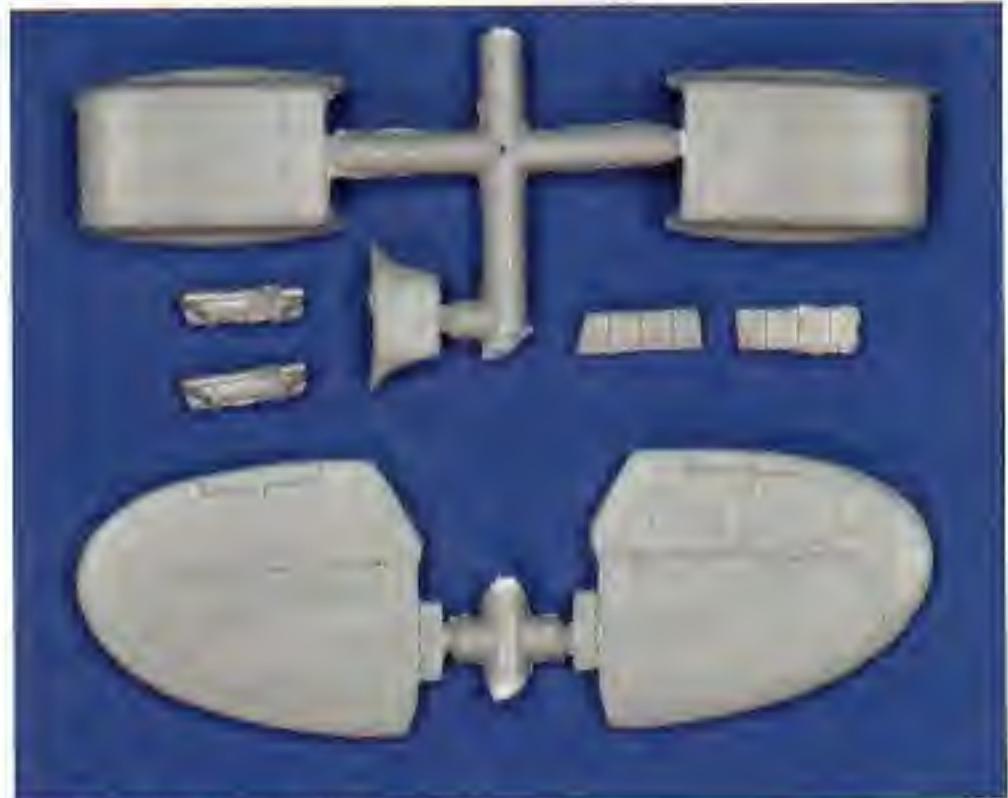
Scale: 1/48th

Product No.: V197



V188B (Spitfire Mk IX & XVI)

Accessories



V190 (Spitfire Mk IX Tailplanes & Radiators)

Type: Correction/Conversion

Designed for: Kit

Parts: Injection Moulded Plastic 1

Price: £1.00

Includes: This is just the broad chord 'pointed' rudder installed on later marks of the Spitfire.

Subject: Spitfire Gun Blister Panels

Scale: 1/48th

Product No.: V198

Type: Accessory/Correction

Designed for: Any Spitfire kit.

Parts: Injection Moulded Plastic 6

Price: £1.40

Includes: This set offers both narrow and wide style of cannon blisters for the 'C' wing, as well as the type for the 'E' wing.

Subject: Spitfire Cannon Barrels

Scale: 1/48th

Product No.: G420

Type: Accessory/Correction

Designed for: Any Spitfire kit.

Parts: White Metal 2

Price: £0.50

Includes: This set offers two cannon barrels suitable for later marks of the Spitfire.



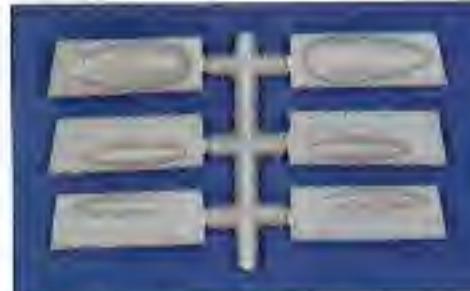
V191 (Spitfire Retractable Tailwheel)



V192 (Spitfire Undercarriage Legs)



V197 (Spitfire Mk IX/XVI Pointed Rudder)



V198 (Spitfire Gun Blister Panels)



G420 (Spitfire Cannon Barrels)

Conclusion

As with all Aeroclub products these are accurate and well produced. The use of injection moulded plastic will be greeted with excitement by many modellers, and we hope Aeroclub will expand this to their entire range as it is so much easier to work with. Aeroclub had to come to a hard decision with the Mk IX and MK XVI sets, as the Oriental kit is so inaccurate as to render it almost unusable, so I am not surprised to see that additional items (some of which are reviewed here) will allow the modeller to convert the Tamiya Mk V kit instead.

Full marks to Aeroclub for yet more

excellent products, and I can only hope they will now turn their attention to the Griffon powered Spitfires as well.

Our thanks to Aeroclub for the review samples.

Dangerboy Hobbies

This is a new name from the USA, and they have sent their first product directly to us for review.

1/48th Scale

Subject: Grumman F6F-3/5 Hellcat

Scale: 1/48th

Product No.: N/A

Type: Wing Fold

Designed for: Hasegawa kit

Parts: Resin 7

Price: £TBA

Includes: This conversion will allow you to pose the Hasegawa kit with the wings folded. The entire wing, including the lower centre section of the fuselage, is supplied in resin. These sections replace the kit parts and once in place the folded

outer panels can be affixed to the lag on the inner panels.

Conclusion

A simple and effective conversion that will allow you to pose the model in a more realistic manner. The sheer size of the conversion does lead to some big resin parts, and this reflects in the price, but if you want to do this without cutting and modifying the kit parts, this is the only game in town. As far as we are aware this range does not currently have a UK stockist, so all enquiries should be directed to the manufacturer.

Our thanks to Dangerboy Hobbies for the review sample.



F6F-3/5 wing fold (Hasegawa)

Belcher Bits

This month sees a new accessory release from Belcher.

1/48th Scale

Subject: Mk 28 Nuclear Bombs; Mk 28EX RE.

IN, RI & FI

Scale: 1/48th

Product No.: BB-13

Type: Accessory

Designed for: N/A

Parts: Resin 16

Price: Can\$19.99 (US\$14.99)

Includes: As the title suggests, this set offers a number of Nuclear bombs. The EX and RE were

carried by the F-100, F-101, F-4, A-4, A-6 and FJ-4, while the IN was carried by the B-47, B-52, B-66, A-3 and F-105. The RI comes in two versions (Mod 7 & 1D). The set also contains four strips of plastic card, so that you can make the fins.

Conclusion

Another excellent set from Belcher, and one I am sure modellers may like to add to the appropriate type, or as a diorama accessory. The quality of the resin components is first rate, with no surface imperfections or air bubbles, and we can highly recommend this set to all.

Our thanks to Belcher Bits for the review sample.



BB-13

Prices: Please note that all foreign prices quoted within this section are those quoted by the manufacturer and therefore will be subject to conversion, shipping and import tax within the UK.

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News

Note: All of the items listed have recently been released and are here for our readers' information. Full reviews of each may appear in a future edition.

AML

Three new sheets from this manufacturer this month.

1/72nd Scale

72003 - Stalin's Eagles in Yaks Pt. I

- 1. Yak-1, 'White 1' of No. 183 IAP, flown by Captain M.D. Barnanov, Stalingrad Front, 1943.
- 2. Yak-1b, 'White 5' of Sword 1 AE, 427th IAP, 294th IAD. Flown by Lt. P.M. Tchivilyev, Sokolniki airfield, August 1943.
- 3. Yak-1b, 'White 47', 156th GIAP, flown by Col. K.Y. Nazzarevitch, Balangy airfield, August 1943.

72004 - Stalin's Eagles in Yaks Pt. II

- 1. Yak-9, 'White 3', 64th GIAP, 4th GIAD, flown by Guard Captain D.N. Fedorovitch, Lyutkino airfield, Winter 1943.
- 2. Yak-9T, 'Red 04', 2. AE, 4th KIAP, flown by Major S.I. Nikitovitch, Brjansk Front, Spring 1944.
- 3. Yak-9, 'White 17', 2. AE, 4th KIAP, flown by Major S.I. Nikitovitch, Brjansk Front, Summer 1943.
- 4. Yak-9T, 1. AE, 66th GIAP, 4th GIAD, flown by Guard Captain V.I. Ivanovitch, Balt Front, May 1944.

1/48th Scale

48-001 - Stalin's Eagles in Yaks Pt. II

This is a scaled-up version of 72004 and offers the same four Yak-9 options.

Fantasy Printshop

A number of new items have been released recently by this manufacturer, including items in all three major scales.

1/72nd Scale

FP814 Ejection Seat Triangles (£1.25)

FP816 Emergency Markings (£1.50)

FP1000 Remove Before Flight Tags (£1.00)

1/48th Scale

FP813 Ejection Seat Triangles (£1.25)

FP815 Emergency Markings (£1.50)

FP1001 Remove Before Flight Tags (£1.25)

1/32nd Scale

FP1002 Remove Before Flight Tags (£1.50)

Red Roo Decals

This month sees the release of a new decal sheet from this Australian manufacturer.

1/72nd Scale

RRD7202 - Lockheed PV-1

- 1. PV-1 Ventura, A59-75, No. 13 Squadron, RAAF, 1944 (Aus\$5.50).

Daco Products

A little batch of very colourful decal sheets have just been released by this manufacturer.

1/72nd Scale

D7246 - F-16A Tigermeet 1998

- 1. F-16A, FA-71, No. 31 Squadron, Belgian Air Force, Tigermeet 1998.
- 2. F-16A, FA-82, No. 31 Squadron, Belgian Air Force, Tigermeet 1994.

This sheet is also available in 1/48th (D4846) and 1/32nd (D3246) scale.

D7247 - F-16A Demo 1998

- 1. F-16A, FA-52, Belgian Air Force, F-16 Demo (20th Anniversary), 1998.

This sheet is also available in 1/48th (D4847) and 1/32nd (D3246) scale.

Astra Decals

Also by Daco, this range has just produced a new sheet that will probably be the first censored product we have featured!

1/72nd Scale

ASD-7211 - F-16A Fighting Falcon

- 1. F-16A, J-248, 'Dirty Diana', No. 323 Squadron, Royal Netherlands Air Force.
- 2. F-16A, J-231, '50 Years of NATO' No. 312 Squadron, Royal Netherlands Air Force.
- 3. F-16A, J-220, '50 Years of NATO' No. 311 Squadron, Royal Netherlands Air Force.

The sheet also includes 'MiG kill' markings for J-220, which was the first aircraft to shoot down a Serbian MiG-29 during the Kosovo Crisis.

This sheet is also available in 1/48th (ASD-4811) scale.

Fighter Decals

This is a relatively new manufacturer from the USA, and they have just passed us their latest sheet along with a sample of their other sheet which is still available:



The decal sheet from 48-001

1/48th Scale

48-001 F-15E Strike Eagle

This sheet includes markings for two machines.

- 1. F-15E, 'Pair-O-Dice', 90th Fighter Squadron, 3rd Wing, Elmendorf AFB, Alaska.
- 2. F-15E, 'Bold Tigers', 391st Fighter Squadron, 366th Wing, Mountain Home AFB. The sheet also includes full stenciling for each of these machines and is designed for the new Revell-Monogram kit of the F-15E. The retail price is \$8.00 and the range is stocked by Meteor Productions.

1/32nd Scale

Already available from Fighter Decals is a sheet for Desert Storm F-15Es in this scale (#32-001) and it offers the following options.

- 1. F-15E, 89-0487, 335th TFS 'Chiefs' flown by Capt. Tim Bennett and Capt Dan Bakke to achieve the first air-to-air kill of Desert Storm.
- 2. F-15E, 87-204, 336th TFS 'Rocketeers'.
- 3. F-15E, 88-1692, 'Spirit of Goldsboro', 4th TFW that was shot down on the 19th January 1991 over Iraq.
- 4. F-15E, 88-1686, 335th TFS 'Chiefs'.



The options offered on 32-001

This sheet is still available from Meteor Productions.

Conclusion:

This new sheet from Fighter has been produced by MicroScale International, so you can be assured of its quality. The 1/32nd scale sheet is also well worth considering, especially if you have the Tamiya or Revell® kits in your pending pile.

Our thanks to Fighter Decals for the review samples.

Blue Rider

A new decal sheet, plus a new book/decal set have just been released by this firm.

1/72nd Scale

BR-0415 - Chilean Air Force 1913-1923



All the options offered on BR-0415

- 1. Avro 504K, S/N 75, Servicio de Aviación Militar de Chile, 1922.
- 2. Avro 504K, S/N 75, Servicio de Aviación Militar de Chile, 1922 (possibly an earlier version of the previous option).
- 3. Avro 504K, S/N 78, Servicio de Aviación Militar de Chile, 1922.
- 4. Avro 504K, S/N 82, Servicio de Aviación Militar de Chile, 1922.
- 5. Avro 504K, S/N 82, 'Curicó', Servicio de Aviación Militar de Chile, 1922-23.
- 6. Avro 504K, S/N 97, 'General Körber', Servicio de Aviación Militar de Chile, 1922.
- 7. Bleriot XI-2, S/N 6, Servicio de Aviación Militar de Chile, 1913-16.
- 8. RAF SE5a, S/N 67, 'Teniente Ilanes', Servicio de Aviación Militar de Chile, 1922-23.

This sheet retails for £3.00.

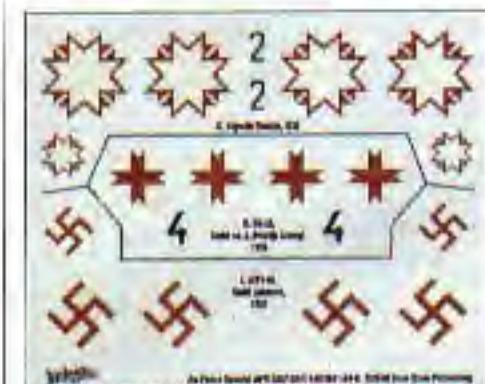
- 9. Sopwith Strutter, S/N 11, Latvian Aviation Park, 1920.
- 10. IMG C.VI, S/N 24, Latvian Aviation Park, 1920.
- 11. Sopwith Strutter, S/N 2 (formerly 2341), Latvian Aviation Division, 1926.
- 12. DFW C.V, S/N 5, Latvian Aviation Division, 1924.
- 13. Ansaldo SVA-10, S/N 5K, Latvian Aviation Division, 1925.
- 14. Svenska Aero 5-IIa, S/N 11, Latvian Aviation Division, 1926-7.
- 15. Albatros C.III, S/N 22 (formerly 1145/18), Latvian Naval Aviation Division, 1923.
- 16. Gondou-Lesueur B3, S/N 30, Latvian Aviation Regiment, 1926.
- 17. Ansaldo A.1, S/N 35, Latvian Aviation Division, 1926.
- 18. Bristol Bulldog Mk II, S/N 80, Latvian Aviation Regiment, mid 1930s.
- 19. Bristol Bulldog Mk II, S/N 80, Latvian Aviation Regiment, 1938.
- 20. Martinsyde E4 Buzzard, S/N 31, School of Military Aviation, 1927.
- 21. Fiat CR.1, S/N 94, 2nd Fighter Squadron, 1934.
- 22. DH9A, S/N 1, Latvian Aviation Regiment, late 1920s.
- 23. Fairey Seal, S/N 29, Latvian Aviation Division, June/July 1936.
- 24. Fairey Seal, S/N 101, 8th Squadron (Naval), 1937.
- 25. Gloster Gladiator Mk I, S/N 114, Latvian Aviation Regiment, 1930s.
- 26. Hawker Hind, S/N 177, No. 5 Reconnaissance Squadron, 1938.
- 27. VEF I-12, Latvian Aviation Regiment, 1939.
- 28. VEF I-15a, Latvian Aviation Regiment, 1939-40.
- 29. VEF I-15b, Latvian Aviation Regiment, 1939-40.
- 30. VEF I-16, Latvian Aviation Regiment, 1940.
- 31. VEF I-19.
- 32. Sopwith Strutter, S/N 2, Latvian National Guard Aviation Branch, 1932.
- 33. Ilyushin IL-2 II, Latvian National Guard Aviation Branch, 1933.

- 34. VEF I-12, S/N 17, 1st Squadron, Latvian National Guard Aviation Branch, 1938.
- 35. Schulgeiter SG 38, S/N 4, Latvian National Guard Aviation Branch, 1938.
- 36. LKOD KOD-1, S/N 22, 2nd Squadron, Latvian National Guard Aviation Branch, 1938.
- 37. LKOD KOD-2, S/N 44, 4th Squadron, Latvian National Guard Aviation Branch, 1939.

This decal and booklet set retails for £9.50.

Conclusion: Another unusual selection of colour schemes from Blue Rider. Some deal with pretty esoteric subjects, but others are very well known. Recommended to all of you looking for some 'alternative' schemes.

Our thanks to Blue Rider Publishing for the review samples.



The two decal sheets and booklet included in the Latvian Air Force special set

Prices: Please note that all foreign prices quoted within this section are those supplied by the manufacturer and the user will be subject to conversion, shipping and import tax within the UK.

AeroMaster

New sheets from AeroMaster this month include five new standard sheets, plus two new book/decal sets, all of which are in 1/48th scale.

1/48th Scale

48-383 Mitchell Collection Pt. V

- 1. B-25D-20, 'Chow Hound Junior', 345th BG, Clark Field, Philippines, June 1945.
- 2. B-25D-1, 41-30669, 'Tondelayo', 500th BS, 345th BG, Nadzab, June 1944.

48-484 Stinging Hornets Pt. V

- 1. F/A-18C, BuNo. 164006, 'Black 201', VFA-27 'Royal Maces', USS Independence.
- 2. F/A-18A, BuNo. 162877, 'Blue 400', VFA-204 'River Rattlers'.

48-485 Stinging Hornets Pt. VI

- 1. F/A-18D, BuNo. 164949, 'Black 402', VMFA(AW)-533 'Hawks'.
- 2. F/A-18C, 'Black 202', VFA-27 'Royal Maces'.
- 3. F/A-18A, BuNo. 163133, 'Blue 01', VMFA-451 'Warlords'.

is SP48-13, which is Part 3 of the 405th Fighter Group in Colour, and offers the following options:

- 1. P-47D-30-RA, 44-32756, 'El Texano', 509th FS, 405th FG.
- 2. P-47D-22-RE, 42-26249, 'Kansas Tornado II', 510th FS, 405th FG.
- 3. P-47D-28-RE, 44-20204, 'Nut Cracker', 509th FS, 405th FG.



48-484 (Stinging Hornets Pt. V)

- 4. P-47D-15-RE, 42-76151, 'Peg O' My Heart', 510th FS, 405th FG.

The other booklet/decal set is SP48-14, which is USS Nimitz CVN-68, Carrier Air Wing Eight, 1977/8 and it offers the following options.

- 1. F-14A, BuNo. 160379, VF-41.
- 2. F-14A, BuNo. 160395, VF-41.
- 3. F-14A, BuNo. 160393, VF-84.
- 4. F-14A, BuNo. 160401, VF-84.
- 5. A-6E, BuNo. 151582, VA-35.
- 6. KA-6D, BuNo. 151578, VA-35.
- 7. EA-6B, BuNo. 159908, VAQ-135.



48-492 (Last of the Breed Pt. I)

- 8. A-7E, BuNo. 159289, VA-82.
- 9. A-7E, BuNo. 157571, VA-82.
- 10. A-7E, BuNo. 159292, VA-86.
- 11. A-7E, BuNo. 159305, VA-86.

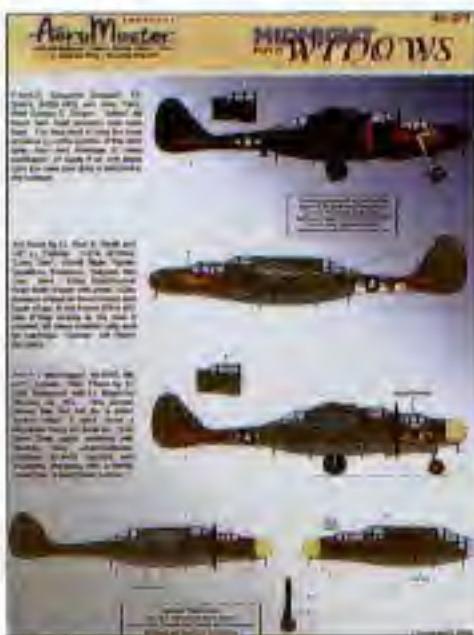
48-489 Midnight Widows Pt. IV

- 1. P-61B-2, 42-39454, 'Cooper's Snooper', 548th NFS, Iwo Jima, 1945.
- 2. P-61A, 42-5544, 'Lady Glen', 422nd NFS, Florennes, Belgium, December 1944.
- 3. P-51A-1, 42-5527, 'Moonhappy', 6th NFS, Saipan, 1944.

48-492 Last of the Breed - Bf 109K Part I

- 1. Bf 109K-4, W/Nr. 330176, 'Yellow 8' of II/JG 77, November 1944.
- 2. Bf 109K-4, 'White 2', 9/JG 77, Neuruppin, November 1944.
- 3. Bf 109K-4, 'Yellow 13' of an unknown unit.
- 4. Bf 109K-4, W/Nr. 33020, Malpensa, Italy, February 1945.

The first special book/decal combination sets



48-499 (Midnight Widows Pt. IV)



48-383 (Mitchell Collection Pt. V)



48-485 (Stinging Hornets Pt. VI)



The four P-47 options offered in SP48-13



The fifteen options offered in SP48-14



Decals

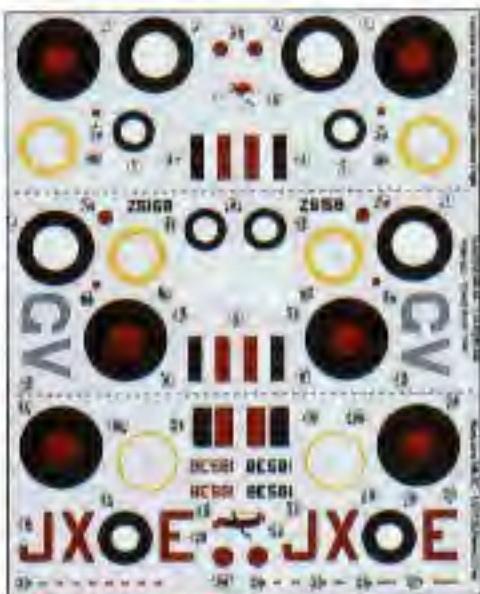
Tally Ho!

This month Tally Ho! have released a new sheet in both 1/72nd and 1/48th scales, although they each deal with the same subject matter.

1/72nd Scale

72-009 - Karel M. Kuttlewascher

- 1. Hurricane Mk IIc, BE581, JX-E of No. 1 Squadron, RAF. In either early (camouflage) or late (overall black) scheme.
- 2. Hurricane Mk I, Langley Defence Flight, October 1941.
- 3. Hurricane Mk IIa, Z5159, GV-33, No. 134 Squadron, Vajenga, USSR, 1941.



The decal sheet from 72-009

1/48th Scale

48-005 - Karel M. Kuttlewascher

- 1. Hurricane Mk IIc, BE581, JX-E of No. 1 Squadron, RAF. In either early (camouflage) or late (overall black) scheme.
- 2. Hurricane Mk IIb, Z5252, 'White 01' flown by Gen Maj A.A. Kuznetsov, Murmansk, October 1941.
- 3. Hurricane Mk IIa, Z5159, GV-33, No. 134 Squadron, Vajenga, USSR, 1941.

Conclusion: Each of these sheets offers all the national and unique markings for each option along with a complete set of stencils. The instructions are in colour, and



The options offered on 48-005

are nice and clear with a cross-reference chart to ES., Agama, Humbrol, Revell®, AeroMaster, Gunze Sangyo and Tamiya paint ranges. Highly recommended to all.

Our thanks to Tally Ho! for the review samples.

SP-Decal

This is a new firm to us, although they started production in October 1999. So far they have released sheets for the following subjects:

1/72nd Scale

72001 - MiG-29 & MiG-29UB

- 1. MiG-29, 29+11, Luftwaffe, 1992.
 - 2. MiG-29UB, 29+25, Luftwaffe Test Centre (WTD 61), Manching Air Base, 1991.
 - 3. MiG-29 of the Yugoslavian Air Force, 1999.
 - 4. MiG-29, 1st Fighter Regiment 'Warszawa', Polish Air Force. This machine carries the emblem of 2e Escadre de Chasse, Armee de l'Air, who brought their Mirage 2000s to Minsk in 1994.
 - 5. MiG-29UB, Polish Air Force, Minsk Maz, 1991.
 - 6. MiG-29, 'Red 66', Polish Air Force, Minsk Maz, 1999.
 - 7. MiG-29, 'Red 70', Polish Air Force, Minsk Maz, 1999.
 - 8. MiG-29UB, 'Black 130', Slovak Air Force, 1994. This machine is in Tiger stripes.
- This sheet also includes three sets of stencils and a template to mask and spray the 2e Escadre de Chasse emblem.



72001 (MiG-29 & MiG-29UB)



72005 (Beaufighter Mk II & VI)



72006 (Mosquito Mk II, VI, XII & 30)

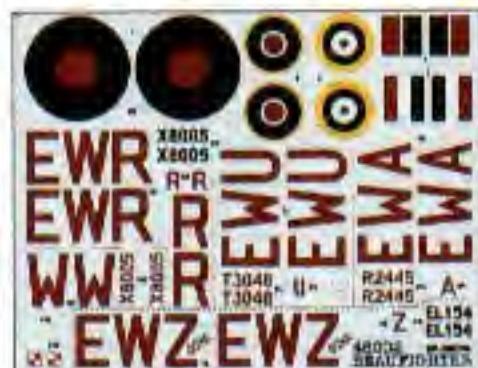


Exeter, 1942.

- 4. Mk VII, X8005, No. 307 Squadron, Exeter, 1943.
- 5. Mk VII, EL154, EW-Z, No. 307 Squadron, Exeter, 1943.

72006 - Mosquito Mk II, VI, XII & 30

- 1. NF Mk II, DZ271, EW-R, No. 307 Squadron, Exeter, 1943.
- 2. FB Mk VI, N??E, -W, No. 305 (Polish) Squadron, Lasham, 1944.
- 3. FB Mk VI, NS927, SM-C, No. 305 Squadron, Lasham, 1944.
- 4. FB Mk VI, LR300, SM-N, No. 305 Squadron, Lasham, 1944.
- 5. NF Mk XII, HK223, EW-E, No. 307 Squadron, Church Fenton, 1944.
- 6. NF Mk XII, HK231, EW-D, No. 307 Squadron, Church Fenton, 1944.
- 7. NF Mk 30, NS565, EW-A, No. 307 Squadron, Castle Camps, 1945.
- 8. NF Mk 30, NT797, EW-O, No. 307 Squadron, Castle Camps, 1945.



48002 (Beaufighter Mk II & VI)

ranges.

To date we are not aware of a UK distributor of this range.

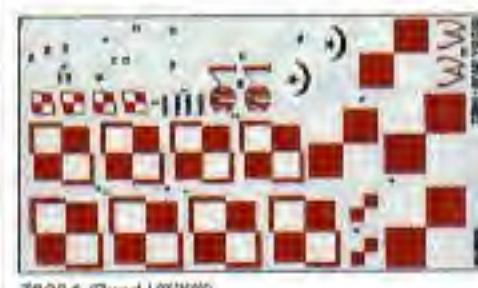
Our thanks to SP Decals for the review samples.



48003 (Mosquito Mk II, VI, XII & 30)



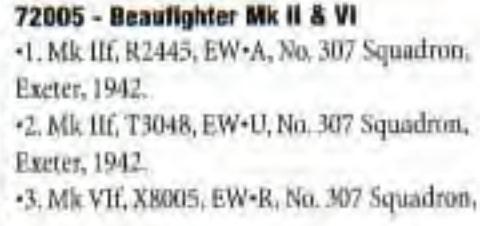
72002 (Cessna Bobcat)



72004 (Spad VII/XIII)



72003 (Lockheed Electra)



72005 (Beaufighter Mk II & VI)

72002 - Cessna Bobcat

- 1. Cessna UC-78 Bobcat, SP-LEN, PLL 'LOT'.
- 2. Cessna UC-78 Bobcat, SP-GLC, Museum of Aviation and Astronautics, Kraków.

72003 - Lockheed Electra

- 1. Lockheed L-10A Electra, SP-AYC, PLL 'LOT'.
- 2. Lockheed L-10A Electra, SP-BGH, PLL 'LOT'.

72004 - Spad VII/XIII

- 1. Spad S.VII flown by Mieczyslaw Garsztka in 1919.
- 2. Spad S.VII, Wysza Szkoła Pilotów, Grudziadz.
- 3. Spad S.VII, Poznań-Lawica, flown by Ludomil Rayski.
- 4. Spad S.XIII, 3 Pułk Lotniczy, Poznań.
- 5. Spad S.XIII, 1 Pułk Lotniczy, Warszawa.
- 6. Spad S.XIII, 4 Pułk Lotniczy, Toruń.
- 7. Spad S.XIII, 4 Pułk Lotniczy, Toruń.
- 8. Spad S.XIII unit unknown.

1/48th Scale

48001 - MiG-29 & MiG-29UB

This sheet offers the same options as on 72-001 listed elsewhere.

48002 - Beaufighter Mk II & VI

This sheet offers the same options as previously listed against 72-005.

48003 - Mosquito Mk II, VI, XII & 30

This is once again a 'scaled-up' sheet and offers the same options as 72-006.

Conclusion:

Each of these sheets includes all the markings required for each option along with at least one set of stencils. The instructions are in black and white, but they offer good details as well as cross reference charts for Humbrol, Xtracolor, Model Master, Agama, Pacta and Model Colour paint.

Prices: Please note that all listed prices quoted within this section are those supplied by the manufacturer and therefore will be subject to conversion, shipping and import tax within the UK.

Fantasy Printshop

This month sees the release of a selection of marking and stencil sets from the Fantasy Printshop.

1/72nd Scale

FP808 - Prototype 'Ps'

This sheet offers these markings in 30in and 36in sizes and retails for £1.00.

FP810 - Maintenance Markings

This sheet offers modern tie-down, lifting and jacking point symbols in black, red, yellow and white.

FP812 - Walkway Markings

This offers the modern 'step and 'no step' markings.



FP807 (Prototype 'Ps')



FP806 (Prototype 'Ps')



FP808 (Prototype 'Ps')



FP809 (Maintenance Markings)



Fantasy Printshop © 1999 Maintenance 1/72

1/48th Scale

FP806 - Prototype 'Ps'

This sheet offers these markings in 30in diameter and this sheet retails for £1.00.

FP807 - Prototype 'Ps'

On this sheet you get these markings 36in diameter and it retails for £1.00.

FP809 - Maintenance Markings

This offers the same style of markings as seen in FP810.

FP811 - Walkway Markings



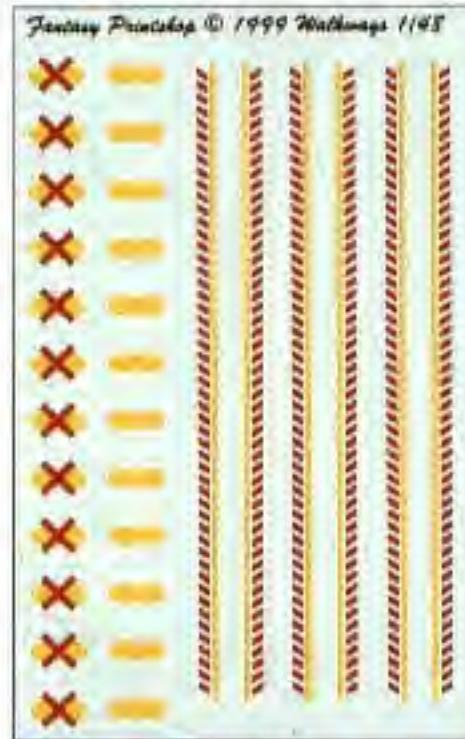
FP812 (Walkway Markings)

This sheet offers the same style of markings as FP812.

Sheets FP809, 810, 811 and 812 are £1.50 each.

Conclusion: These are all very good subjects and have been very well produced by Fantasy. I have to say that the limited size and number of images on each sheet does make the overall price seem high, but that is a personal point and one that readers can decide on themselves.

Our thanks to Fantasy Printshop for the review samples.



FP811 (Walkway Markings)

Custom Aeronautical Miniatures

Three new sheets in 1/48th scale have recently been released by CAM and samples of each have been passed directly to us for review.

1/48th Scale

48-021 - F-14A Tomcat

- 1, F-14A, BuNo. 159428, VF-33 'Starfighters', USS America, 1982.
- 2, F-14A, BuNo. 158988, VF-2 'Bounty Hunters', USS Enterprise, 1974

48-037 - F-4J Phantom

- 1, F-4J, BuNo. 153828, VMFA-115.

48-039 - F/A-18 Hornet

- 1, F/A-18 Hornet, BuNo. 164006, VFA-27 'Maces', USS Independence, August 1996. The sheet includes 'Micro-glo' luminous formation light strips.

Luminous formation light strips are a strange idea, although they will look good once the light goes out at night! These sheets retail for \$10 (48-021 & 039) and \$15 (48-037) respectively, and all retail and wholesale enquiries should be directed to Brookhurst Hobbies. UK modelers can obtain examples from Hannants.

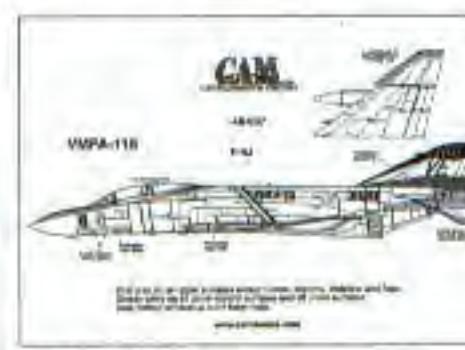
Our thanks to Brookhurst Hobbies for the review samples.



48-021 (F-14A Tomcat)



48-037 (F-4J Phantom)



48-039 (F/A-18 Hornet)

AVAILABLE IN GOOD MODEL SHOPS

squadron/signal publications



NEW AND REISSUED BOOKS

1172 Fiat CR32/CR42 in Action		Mar	£6.99
8048 B-24 Liberator in Detail		Mar	£10.95
1096 AH-64 Apache in Action		Release Mar	£6.99
1028 Curtiss P-40 in Action		Release Apr	£6.99
1127 Mosquito in Action pt.1		Release May	£6.99
8328 F4F Wildcat in Detail		May	£10.95
1130 Mosquito in Action pt.2		Release Jun	£6.99

PPFE and a large SAE for Catalogue and art.

PM MODEL KITS

	PM017 MiG R111		1/72	£3.95
	PM011 Saab Fury FB.11 Royal Navy		1/72	£3.95
	PM018 Spitfire Mk.V Royal Air Force		1/72	£3.95
	PM012 Sea Fury T.21 Royal Navy Trainer		1/72	£3.95
	PM013 Foden Wulli T1-163 Wickham		1/72	£3.95
	PM014 Sea Fury T.61 Iraqi & Pakistan AF		1/72	£3.95
	PM015 Foden Wulli T1-163 Iraqi & Polish AF		1/72	£3.95
	PM016 Hunter F.58/59-1 Flying Wing		1/72	£3.95
	PM017 Mirage IIIA Argentine AF		1/72	£3.95
	PM018 Hunter F.58/59-2 Flying Wing		1/72	£3.95
	PM019 Foden Wulli Ta-154		1/72	£3.95
	PM020 Spitfire Mk.VII Top RAF & USAF		1/72	£3.95
	PM021 Su-21F Flagon USSR		1/72	£4.95
	PM022 F-16 Fighting Falcon USAF & TuAF		1/72	£4.95
	PM023 C-45 Escadrille RAF & US Navy		1/72	£4.95
	PM024 NF-5A Taifun Turkish Stars Aerobatic Team		1/72	£4.95
	PM025 DBF-194 German Rocket Plane		1/72	£4.95

Many more items available send large SAE for free list.

RUSSIAN KITS

	RTU02 Tu-22M Short-range Airliner	1/144	£14.99
	RTU03 Yak-40-300 Long-range Airliner	1/144	£16.99
	RTU04 Tu-164 Medium-range Airliner	1/200	£12.99
	RTU05 Gagarin Soviet Research PROG P4001	1/72	£9.99
	RAE72020 L-29G-7 USSR 1942/44 (x2 PROG)	1/72	£9.99
	RAE72021 MiG-3M SN.1st Fighter	1/72	£9.99
	RAE72021 MiG-17PF Flanker 1957/59	1/72	£9.99
	RAE72022 Neupport N.12 RFFC 1912	1/72	£9.99
	RAE72023 F-35A Philippine Defender	1/48	£9.99
	RAE72024 Piper J-3 Cub	1/48	£7.99

Many more items available send large SAE for free list.

HOBBYCRAFT KITS

	HC1281 B-47G USAF Stratojet		1/144	£11.95
	HC1292 B-47H 1st SAC Jet Striker		1/48	£11.95
	HC1303 C-7 Caribou Vietnam 1967/73		1/72	£17.95
	HC1304 Dornier Do-17Z Commonwealth 1944		1/48	£9.95
	HC1305 F-104 Starfighter Vietnam 1967/72		1/48	£9.95
	HC1311 F-105 Thunderchief Korea 1952/53		1/48	£9.95
	HC1312 F-105D USAF/CSSR 1964/67		1/48	£9.95
	HC1313 F-105G USAF/CSSR 1964/67		1/48	£9.95
	HC1314 MiG-19PS 1947/50 Russia		1/48	£9.95
	HC1315 MiG-17PF Flanker 1957/59		1/48	£10.95
	HC1316 Neupport N.12 RFFC 1912		1/72	£9.95
	HC1317 F-35A Philippine Defender		1/48	£9.95
	HC1318 Piper J-3 Cub		1/48	£7.99

	HC1340 S-21 Tracker US Navy 1968/69		1/72	£7.49

Decals

Eagle Strike

This month sees another selection of sheets in 1/72nd and 1/32nd scales, but also sees some new sheets in 1/48th scale.

1/72nd Scale

72013 - Pacific Corsairs

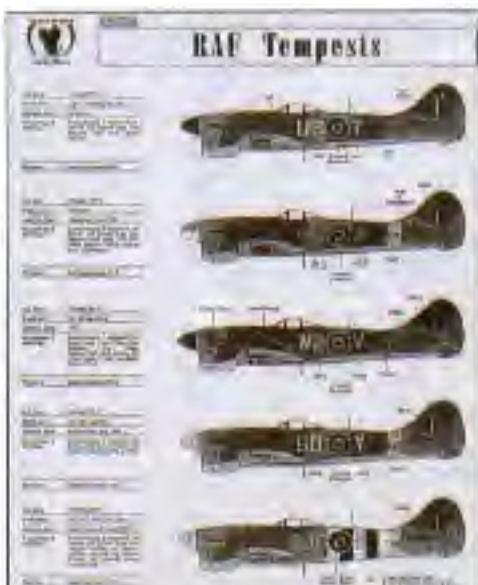
- 1. F4U-1, 'White 108', flown by Major George Hallowell.
- 2. F4U-1D, 'White 29', flown by Lt. Jg. Ira Keptford.
- 3. F4U-1C, VBF-99, USS Shangri-La, July 1945.
- 4. F4U-1, VE-124, Guadalcanal, 1943.
- 5. F4U-1, VF-17, USS Bunker Hill.
- 6. F4U-1, VMF-215, Munda Airstrip, August 1943.



72016 (European Thunderbolts Pt.II)



72016 (European Thunderbolts Pt.III) The main decal sheet from 48002 (F/A-18C Hornets of the Fleet Pt.I)



72022 (RAF Tempests)



72019 (F/A-18C Hornets of the Fleet Pt. II)

32014 (Curtiss Fighters, P-40s Pt.I)



72018 (F/A-18C Hornets of the Fleet Pt.I)



72013 (Pacific Corsairs)

- 2. Mk 6, NX126, GN-A, Iraq, 1947.
- 3. Mk V, EJ865, W2-Y, No. 80 Squadron, 1947.
- 4. Mk V, EJ555, SD-Y, No. 501 Squadron, Bradwell Bay, 1944.
- 5. Mk V, ??/65, JP-K, No. 3 Squadron, Newchurch, June 1944.

1/48th Scale

48002 - F/A-18C Hornets of the Fleet Pt.I

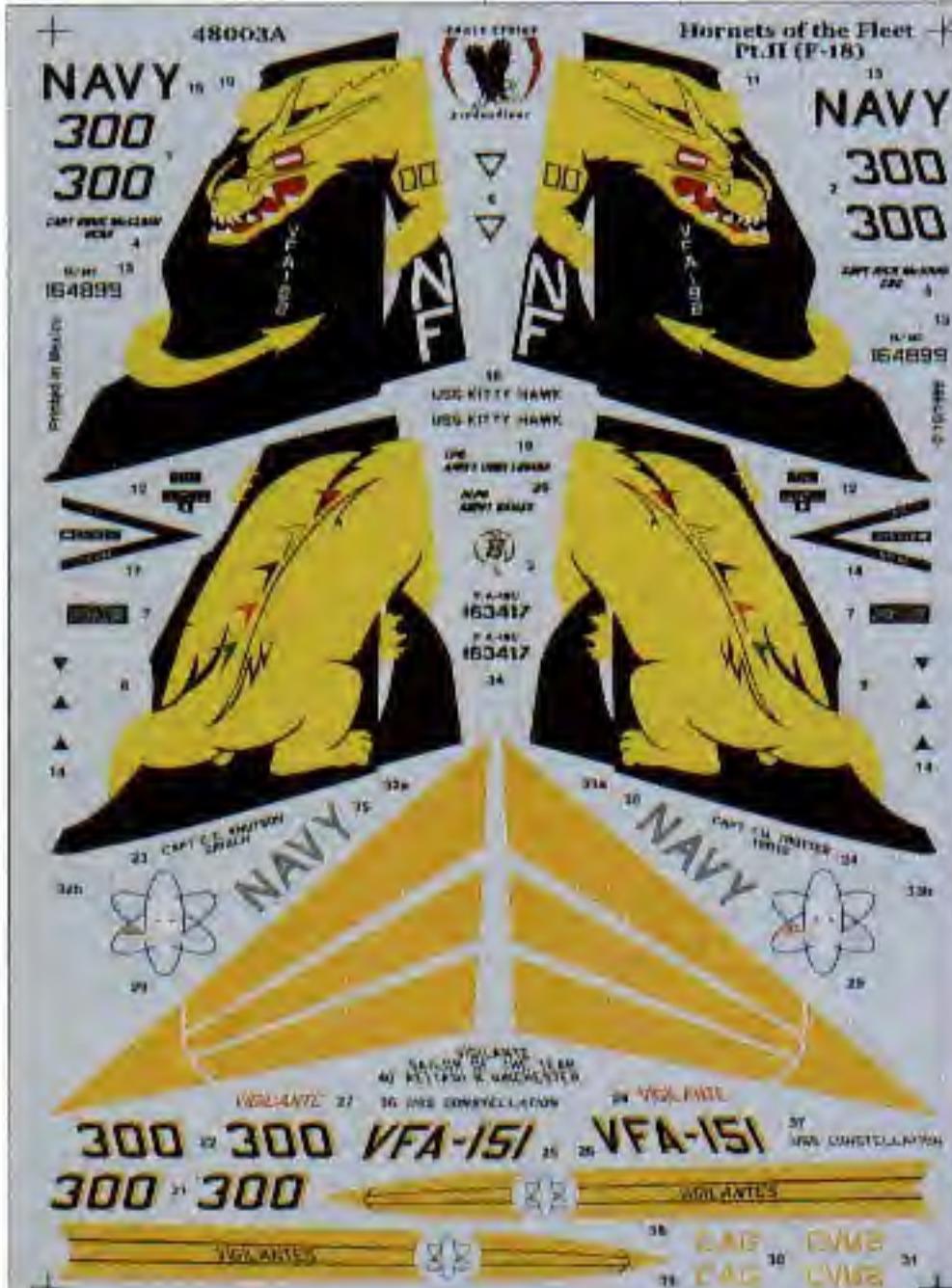
- 1. F/A-18C, VMFA-232.
- 2. F/A-18C, VFA-137, USS Constellation.

48003 - F/A-18C Hornets of the Fleet Pt. II

- 1. F/A-18C, VFA-192 'Golden Dragons' Atsugi, Japan, 1998.
- 2. F/A-18C, VFA-151, USS Constellation.

1/32nd Scale

32014 - Curtiss Fighters, P-40s Pt.I



The main decal sheet from 48003 (F/A-18C Hornets of the Fleet Pt. II)

Prices: Please note that all foreign prices quoted within this section are those supplied by the manufacturer and therefore will be subject to conversion, shipping and import tax within the UK.

32015 (Wildcats at War)



72015 (Wildcats at War)



72013 (Pacific Corsairs)

- 1. Kittyhawk Mk. III, EW421, DB-H, No. 2 (SAAF) Squadron, North Africa, 1942.
- 2. P-40K, 26th FS, 51st FG, Karachi, India, 1943.

32015 - Wildcats at War

- 1. F4F-3, VF-6, USS Enterprise, early 1942.
- 2. F4F-4, USS Enterprise, July/Aug 1942.
- 3. F4F-4, VC-39, USS Liscome Bay, November 1943.

Conclusion: As with all Eagle Strike sheets these latest examples are very well produced. Most of the sheets offer enough national and unique markings for all the options, plus one set of stencils.

Our thanks to Eagle Strike for the review samples.



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Polikarpov U-2/Po-2



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Modelling Products

Modelismo Minimeca

This month sees the release of some more packs of tubing from this manufacturer, along with a clever combination of this material to offer bazooka tubes in both 1/72nd and 1/48th scale.



Ref 132

Ref 132 - Tubing
1.50mm Dia x
10mm (Qty 20)

Ref 133 - Tubing
1.50mm Dia x



Ref 133

Ref 134

20mm (Qty 20)
Ref 134 - Tubing 1.50mm Dia x 250mm
(Qty 5)

1/72nd Scale

Ref 7204 - M10 (114mm) Bazooka tubes
(Two sets of 3 tubes)



Ref 7204

Ref 4804 - M10 (114mm) Bazooka tubes
(Two sets of 3 tubes)

The last two items consist of six lengths of suitable diameter tubing and a sheet of lead foil. The instructions with these sets show how the tubes should be stacked into a pyramid (three per set) and then strips of the foil used to strap them in place. The retaining lugs etc will have to be scratch built by the

modeller, but at least the instructions show the items quite clearly.

Conclusion

Yet more excellent and very useful sets of tubing from this manufacturer. The Bazooka sets are a nice touch, although the lack of all necessary parts to make up each set accurately is a bit annoying. The instructions



Ref 4804

state that the lugs off the kit parts should be used but I can't see much success in getting those items trimmed off the main kit parts, especially in 1/72nd scale!

Our thanks to Minimeca Modelismo for the review samples, UK modellers can obtain this range from Hobby Boundaries.

BlackMagic™

Another batch of die-cut masks in this range has been released by Cutting Edge (Meteor Productions) recently, and examples of each have been passed to us for review.

1/72nd Scale

CEBM72101 - Martin B-10 Canopy/Wheel Hub (Williams Bros) [\$6.99]
CEBM72109 - Hawker Typhoon Canopy/Wheel Hub (Academy) [\$4.99]



CEBM72111

Bf 109G

Canopy/Wheel Hub Masks
for Academy

CEBM72111 (Academy)

P-47D Bubbletop

Canopy/Wheel Hub Masks
for Hasegawa



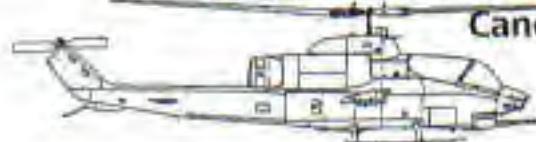
CEBM48397

1/48

CEBM48397 (Hasegawa)

Bell AH-1T/Z Cobra

Canopy Masks
for Italeri



CEBM48415

1/48

CEBM48415 (Italeri)

Fairey Swordfish

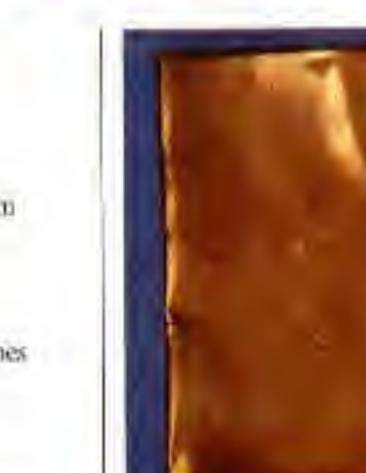
Early "A" Scheme Camouflage Masks
for Tamiya



CEBM48457

1/48

CEBM48457 (Tamiya)



CEBM72101

Martin B-10

Canopy/Wheel Hub Masks
for Williams Bros

CEBM72101 (Williams Bros)

1/72

CEBM72101

CEBM72111 - Messerschmitt Bf 109G Canopy/Wheel Hub (Academy) [\$4.99]
CEBM48395 - Nakajima B6N2 'Jill' Canopy/Wheel Hub (Hasegawa) [\$6.99]



CEBM48395

Nakajima B6N2 "Jill"

Canopy/Wheel Hub Masks
for Hasegawa

CEBM48395 (Hasegawa)

1/48

CEBM48457 - Fairey Swordfish Early 'A' Pattern Camouflage (Tamiya) [\$11.99]

CEBM48458 - P-117 Stealth Canopy/Wheel Hub (Testors/Italeri) [\$5.99]

CEBM48459 - Fairey Swordfish Early 'B' Pattern Camouflage (Tamiya) [\$11.99]

CEBM48460 - Fairey Swordfish 'Late' Scheme Camouflage (Tamiya) [\$11.99]



CEBM72109

1/72

CEBM72109 (Academy)



CEBM48460

1/48

CEBM48460 (Tamiya)

Typhoon

Canopy/Wheel Hub Masks
for Academy

CEBM72109

1/72

CEBM72109

Fairey Swordfish

"Late" Scheme Camouflage Masks
for Tamiya

CEBM48460

1/48

CEBM48460 (Tamiya)

MiG-17 Fresco

Canopy/Wheel Hub Masks
for TRUMPETER/FROG

CEBM32052

1/32

CEBM32052 (Trumpeter/Frog)

F-117 Stealth Fighter

Canopy/Wheel Hub Masks
for Testors/Italeri

CEBM450458

CEBM450458 (Testors/Italeri)

1/48

Fairey Swordfish

Early "B" Scheme Camouflage Masks
for Tamiya

CEBM48459

CEBM48459 (Tamiya)

1/48

Grumman F3F

Canopy & Stripes Masks
for Accurate Miniatures

CEBM48396

CEBM48396 (Accurate Miniatures)

1/48

Cessna 172

Canopy & Stripes Masks
for Accurate Miniatures

CEBM48397

CEBM48397 (Accurate Miniatures)

1/48

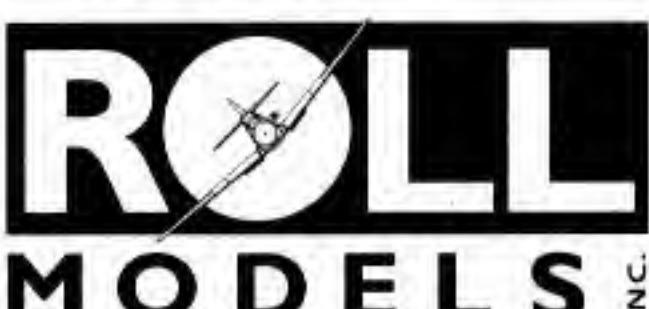
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FJ481109	Hawker Hunter FR.11 Conversion	\$13.95	RH142	Aircraft Canopy Mirrors (1:72)	\$8.75	TM72544	CA.311,313,314/SM.79/SM.81 2001,2.5	\$8.75
FJ481110	USAF Fighter Pilot seated (Korean War)	\$3.25	RH143	Aircraft Canopy Mirrors (1:48)	\$8.75	TM72545	Beech C-45/DC-6 Sq #s/Badge/Serj AMI	\$8.75
FJ721003	Gloster Meteor F.4 RAF	\$31.00	RH144	Aircraft Canopy Mirrors (1:32)	\$8.75	TM72548	SB2/C-S2F/C-130H/P-51/P-47/Toma Bdg AMI	\$8.75
FJ721005	Gloster Meteor FB RAF	\$31.95	RH145	Electon Seat Activations (1:72)	\$8.25	TM72549	AB-205/212/SH-34 Data/Stencils	\$8.75
FJ721006	Gloster Meteor FB RAF	\$31.95	RH146	Electon Seat Activations (1:48)	\$8.25	TM72550	P-39/CANT Z.501/1007/Sq/R/156/MG.200 2.5/Spit	\$8.75
FJ721007	Hawker Hunter FB RAF	\$39.95	RH147	Electon Seat Activations (1:32)	\$10.00	TM72552	Rounds.....	\$8.75
FJ721008	Hawker Hunter FR Belgian AF	\$39.95	RH148	Cockpit Circuit Breaker Panels (1:72)	\$8.25	TM72554	P-39/CANT Z.501/1007/Sq/R/156/MG.200 2.5/Spit	\$8.75
FJ721009	Gloster Meteor TT RAF	\$32.95	RH149	Cockpit Circuit Breaker Panels (1:48)	\$8.25	TM72555	Rounds.....	\$8.75
FJ721010	Gloster Meteor TT RAF	\$32.95	RH150	Cockpit Circuit Breaker Panels (1:32)	\$10.00	TM72556	Sq #/Badges	\$8.75
FJ721011	Hawker Hurricane Mid Prop	\$1.95	RH151	Aircraft Canopy Breakers (1:72)	\$8.25	TM72557	CANT 2.501/SM.79/SM.79 Inseg RA	\$8.75
FJ721013	Mirage 5SR Conversion	\$6.50	RH152	Aircraft Canopy Breakers (1:48)	\$8.75	TM72558	F-104 Luft Commemorative	\$8.75
FJ72104	Flora Modem (Standing) x 2	\$3.95	RH153	Aircraft Canopy Breakers (1:32)	\$10.00	TM72559	F-104/SM.73 Ab Litton Insignia	\$8.75
FJ72105	Flora WWII seated	\$3.95	RH154	Electon Seat Guide Rails (1:72)	\$8.75	TM72560	F-104 AMI Commem.....	\$8.75
FJ72106	Flora Modem (String) x 2	\$3.95	RH155	Electon Seat Guide Rails (1:48)	\$11.00	TM72561	F-104/AM/Desert Storm Commem.	\$8.75
FJ72107	Flora FB Large Air Intakes	\$3.95	RH156	Electon Seat Guide Rails (1:32)	\$11.95	TM72562	F-104 AMI Commemorative	\$8.75
FJ72108	Hawker Hunter Conversion	\$16.95	RH157	Vintage Cockpit Details (1:48)	\$8.25	TM72564	P-51D Luft USAAF/AFSCAS migs	\$8.75
PROMASK 2005			RH158	Vintage Cockpit Details (1:32)	\$8.75	TM72566	P-51D AFUSAFAF/MLRAF	\$8.75
airbrush masks 1:48			RH159	Vintage Cockpit Details (1:24)	\$8.75	TM72568	Bf.109E/R/Bf.110 Data Stenciling	\$8.75
PRO48001	RAF Spitfire Roundels	\$3.25	RH160	Aircraft Placard Holders & Clipboard (1:72)	\$8.25			
PRO48002	RAF Hurricane Roundels	\$3.25	RH161	Aircraft Placard Holders & Clipboard (1:48)	\$8.25			
PRO48003	*RAF Code Letters 24 Bold Style*	\$3.25	RH162	Aircraft Placard Holders & Clipboard (1:32)	\$8.25			
PRO48004	*RAF Code Letters 30 Bold Style*	\$3.25	RH163	Modem Cockpit Details (1:48)	\$8.75			
PRO48005	British National Insignia	\$3.25	RH164	Modem Cockpit Details (1:32)	\$8.75			
PRO48006	IAF National Insignia	\$3.25	RH165	Modem Cockpit Details (1:24)	\$8.75			
PRO48007	Czech National Insignia	\$3.25	RH166	Modem Cockpit Details (1:24)	\$8.75			
PRO48010	Lufwaffe Code Numbers w/o outline	\$3.25	RH167	Modem Cockpit Details (1:24)	\$8.75			
PRO48011	Lufwaffe Code Numbers with outline	\$3.25	RH168	Modem Cockpit Details (1:24)	\$8.75			
PRO48012	USAF National Insignia Early Type	\$3.25	RH169	Modem Cockpit Details (1:24)	\$8.75			
PRO48013	USAF National Insignia Late Type	\$3.25	RH170	Modem Cockpit Details (1:24)	\$8.75			
PRO48014	RAF Hurricane w/o outline	\$3.25	RH171	Modem Cockpit Details (1:24)	\$8.75			
PRO48015	*RAF Code Letters 24 Thin Style*	\$3.25	RH172	Modem Cockpit Details (1:24)	\$8.75			
PRO48016	*RAF Code Letters 30 Thin Style*	\$3.25	RH173	Modem Cockpit Details (1:24)	\$8.75			
PRO48017	RAF Mosquito Roundels	\$3.25	RH174	Modem Cockpit Details (1:24)	\$8.75			
PRO48018	RAF Beaufighter Roundels	\$3.25	RH175	Modem Cockpit Details (1:24)	\$8.75			
PRO48019	*Stripes (0.8, 1.5, 2.0, 2.5mm)*	\$3.25	RH176	Modem Cockpit Details (1:24)	\$8.75			
PRO48020	*Stripes (1.2, 1.5, 4.5mm)*	\$3.25	RH177	Modem Cockpit Details (1:24)	\$8.75			
PRO48021	RAAF Hurricane with outline	\$3.25	RH178	Modem Cockpit Details (1:24)	\$8.75			
PRO48022	Masking Foil	\$3.25	RH179	Modem Cockpit Details (1:24)	\$8.75			
PRO48023	RAF Swordfish Insignia	\$3.25	RH180	Modem Cockpit Details (1:24)	\$8.75			
REHEAT MODELS			RH181	Modem Cockpit Details (1:24)	\$8.75			
etched brass & resin accessories and figures			RH182	Modem Cockpit Details (1:24)	\$8.75			
RH001	Acet. II Ejector Seat (1:32)	\$12.35	RH183	Modem Cockpit Details (1:24)	\$8.75			
RH002	Seat Buckle/Harness pk; Mod/Wn (1:72)	\$7.25	RH184	Modem Cockpit Details (1:24)	\$8.75			
RH003	Seat Buckle/Harness pk; Modm/Wn (1:48)	\$6.00	RH185	Modem Cockpit Details (1:24)	\$8.75			
RH004	Buckle/Harness Pack; ModWn (1:32)	\$6.00	RH186	Modem Cockpit Details (1:24)	\$8.75			
RH006	Modern USAF Fighter Pilot (1:32)	\$11.95	RH187	Modem Cockpit Details (1:24)	\$8.75			
RH007	Modern Luftwaffe Crew; 2 figures (1:32)	\$20.00	RH188	Mod				

The Bristol Blenheim Mk I



Bristol Blenheim Mk I, L1252/34-H of No 34 (B) Squadron, Upper Heyford, 1936.
Note modified original production 35" roundels to 45.5" diameter. Night on all
undersides. White serial under wings, reading from leading edge under port wing,
and from trailing edge under starboard. A1 roundels above wings



Bristol Blenheim Mk I, K7045/114-Z, N° 114 (B) Squadron, Wyton, as noted
during the Hendon Air Display of June 1937. Night undersides. White serial
reads from leading edge under port, and from trailing edge under starboard
wing. A1 roundels above wings



Bristol Blenheim Mk II, WO-P of N° 604(F) Squadron, early 1939. Night
undersides. White under starboard wing except for engine cowling and aileron.
White underside to starboard elevator, but moving surface remained Night. 32"
B roundels under both wings. Codes on starboard side read WO-P



Bristol Blenheim Mk II, L1233/ZK-I of N° 25 (F) Squadron, North Weald, February
1940. Dark Earth/Dark Green uppersurfaces with Night/White undersides divided
down fuselage centreline. Note original production 35" diameter roundel. Codes on
starboard side read ZK-I



Bristol Blenheim Mk II, K7159/YX-N, of N° 54 Operational Training Unit, September
1941. Overall Special Night (FDM.2) finish. Note yellow outline to 'W' of code,
according to directives to OTUs issued in May 1941; serial in very small digits just
ahead of tail unit. Upper wing markings are Type B, although that on starboard was
standard 65.5in diameter while that on port was about 2/3 of its size





A picture with plenty of usually hidden detail for the modellers: Blenheims Mk I under the final assembly line at Bristol's Filton plant in 1938 (photo: G. M.)

'Britain First'

As soon as the Air Ministry pronounced its interest in Britain First, Captain Frank Barnwell (Bristol Aeroplane Co's chief designer) sat down to work on a bomber version to be powered either by Aquila or Mercury engines. It was designed around a crew of three, with a capability of carrying a 1000-lb bomb load over a range of 1000 miles. This bomber was to be derived from Bristol's Type 142, a twin-engined transport capable of carrying six passengers and a crew of two. Its prototype had flown for the first time on April 12 1935 at Filton, creating a sensation when it clocked a maximum speed of 307 mph. During a design conference on July 9, Barnwell presented his layout for a Mercury-engined version, designated as 'Type 142M Blenheim I'. A major departure from Britain First was a higher wing position, raised to mid-fuselage, thus making way for a bomb bay below the main spars. The structure was generally strengthened while a semi-retractable dorsal gun turret was housed half-way down the fuselage, just aft of the wing trailing edges.

Proposals discussed during that conference were embodied into Specification 28/35. Detail design was initiated immediately, with a contract of 150 machines being received by Bristol in September. Finland, which had already

The Bristol Blenheim Mk I

When Bristol's Type 142 went for airworthiness acceptance trials at Martlesham Heath in June 1935 it created a sensation. This clean, twin-engined high-speed transport monoplane proved to be some 50 miles per hour faster than the winner of the E7/30 competition, the Gloster Gladiator prototype. Its performance and handling qualities were so impressive that the Air Ministry performed a full evaluation to explore the possibility of a bomber version. Named 'Britain First', it sired a family of aircraft which were to be used in practically all major roles throughout the Second World War, from fighter to bomber, reconnaissance and torpedo bombing. Richard J. Caruana takes a close look at the first major model to emerge from this thoroughbred, the Bristol Blenheim Mk I.

shown interest in Type 142F earlier in 1935, placed an order for ten examples of the new 142M; this was followed by another for eight machines from Lichamsa (which, however, never materialised). The Air Ministry accepted that a number of the new aircraft could be exported to friendly countries after Bristol could guarantee that the Royal Air Force's (RAF) needs could be adequately met. Firm export orders were negotiated in March 1936 for 18 examples to Finland and 12 for Turkey the following month; in May, a Yugoslav delegation expressed its interest whilst visiting Bristol's facilities.

Prototype K7033 (c/n 7986), which was

in fact the first production machine, made its first flight on June 25, 1936; by that time it had been officially named 'Blenheim Mk I'. Its acceptance trials were completed by the end of that year, during which time some modifications were made to aircraft already on Bristol's production line. These consisted of controllable cooling gills on the engine cowlings, improved carburetor air intakes and the deletion of tailwheel retraction gear which was considered superfluous.

Into Service

Blenheims from the first production batch (K7034-K7182) were beginning to come

out of Bristol's facility early in 1937 although deliveries were delayed awaiting the arrival of B.I Mark I dorsal turrets. First to receive the Blenheim was No 114 (B) Squadron at Wyton on March 10, although the first machine to arrive, K7036, suffered a landing accident and had to be written off.

Meanwhile the first order was followed by another for 434 examples in July 1936 (L1097-1, 1530) which was soon increased by a further 154 (L1531-L1546, L4817-L4934). Bristol eventually was to build 694 Blenheim Mk Is out of a total of 1,280, with the balance being constructed by A.V.Roe & Co Ltd at Chadderton and Rootes Securities Ltd at Speke. Sixteen UK-based bomber squadrons were equipped with the type at the time of the Munich Crisis and early in 1938 overseas squadrons received Blenheims Mk I, the first being No 30 Squadron based at Habbaniya, in Iraq. Units in India began to receive Blenheims a year later.

Slowly but surely, the Blenheim Mk I was replaced by its long-nose version, the Mk IV, so much so that when war broke out in September 1939 the earlier version equipped only two bomber squadrons in UK, while seven fighter squadrons were equipped with the Mk. If fighter derivative. This was a straightforward modification, with the application of gun packs under the bomb-bay, housing four .303in Brownings.

The Bristol Blenheim Mk I

Bristol Blenheim Mk I, L1581/VA-G, of No. 84 (B) Squadron operating in Greece, December 1940. Dark Earth/Dark Green uppersurfaces and Sky undersides. Roundels under both winglips; code 8G starboard reads VA-G



Bristol Blenheim Mk I, L6670/UQ-R, of No. 217 (B) Squadron operating in Greece, early in 1941. Dark Earth and Mulsanne uppersurfaces with (most probably) Light Mediterranean Blue undersides. Codes read UQ-R on starboard side



Bristol Blenheim Mk II, L1210/P, of No. 771 Squadron, Fleet Air Arm. Extra Dark Sea Grey/Dark slate grey upper surfaces, Sky undersides. Standard type B roundels above wings



Martin-built Blenheim Mk I, Yugoslav Air Force, 1938. Dark Green/Dark Earth/Mulsanne uppersurfaces with light blue undersides. National markings above and below both wings only

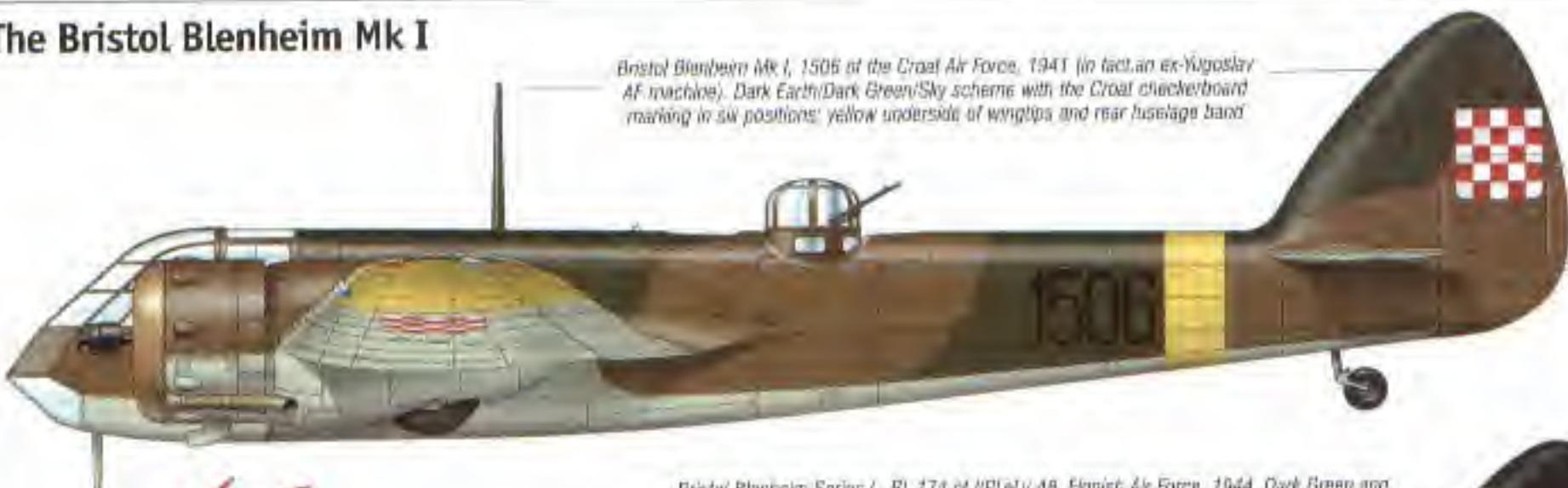


Bristol Blenheim Mk I, Romanian Air Force. Dark Earth and Dark Green uppersurfaces, with light blue undersides. Yellow underside of winglips and rear fuselage band. National markings in six positions



The Bristol Blenheim Mk I

Bristol Blenheim Mk I, 1506 of the Croat Air Force, 1941 (in fact an ex-Yugoslav AF machine). Dark Earth/Dark Green/Sky scheme with the Croat checkerboard marking in six positions: yellow underside of wingtips and rear fuselage band



Bristol Blenheim Series I, BL-174 of IIPLeLv 48, Finnish Air Force, 1944. Dark Green and Black upper surfaces with Light Blue undersides. Yellow underside of wingtips and rear fuselage band. National markings in six positions. Note unit badge on front nose fairing



Bristol Blenheim Series I, BL-106, Finnish Air Force, operated by LeLv 5, 1952. Dark Green upper surfaces and light blue undersides. Post-war style roundels in six positions



Left: Camouflage pattern of Dark Green and Black of Finnish Air Force Blenheims. Note position and size of national markings, and painted walkway



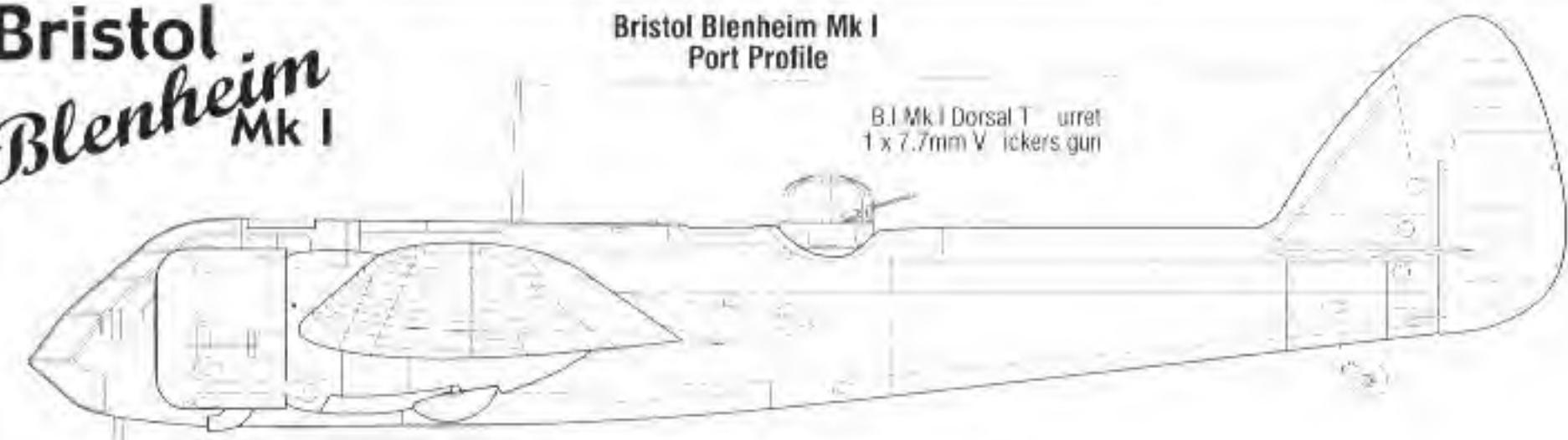
'B' Scheme camouflage pattern for RAF Blenheims, showing early style A1 roundels above wings. 'B' pattern was usually reserved for 'odd-number' serialled aircraft

'A' Scheme camouflage pattern for RAF Blenheims, showing standard WWII 'B' roundels above wings. 'A' pattern was usually reserved for 'even-number' serialled aircraft

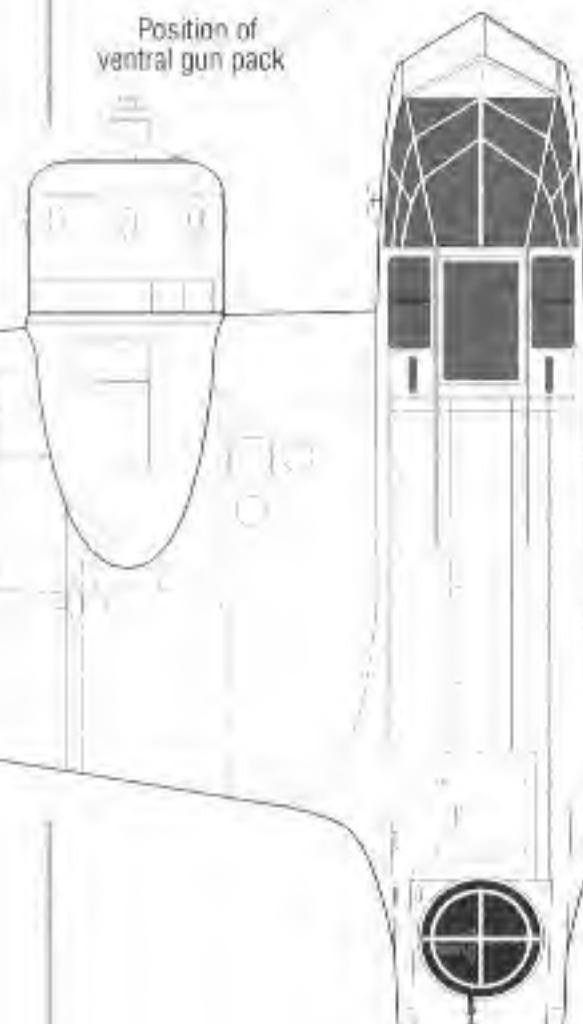
Bristol Blenheim Mk I

Bristol Blenheim Mk I
Port Profile

B.I Mk I Dorsal Turret
1 x 7.7mm Vickers gun

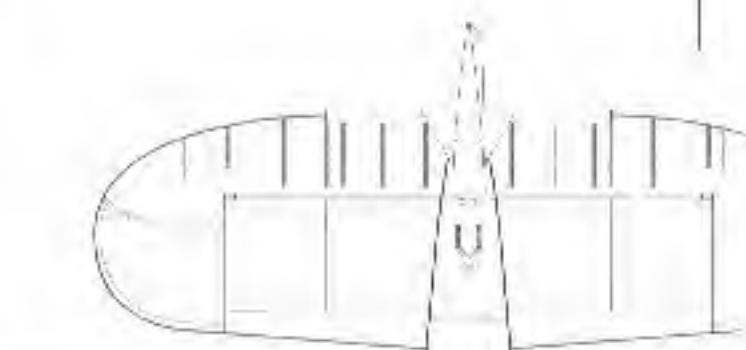


Position of
ventral gun pack



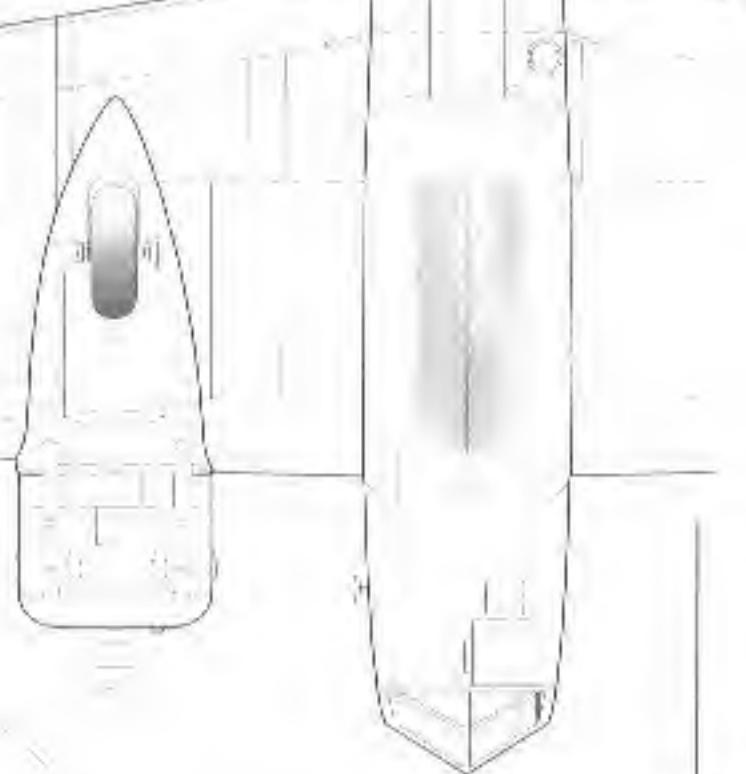
Bristol Blenheim Mk I
Upper Plan

Profile and plan scrap views
of Blenheim Mk I gun pack



Bristol Blenheim Mk I
Inverted Plan

Shaded area
indicates position of
ventral gun pack



Gun camera
this side only

Bristol Blenheim Mk I
Front View

0 metres 1
0 feet 3 6

Scale: 1/72

DRAWINGS BY
RICHARD J. CARUANA
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The two UK squadrons, No 18 and 57, soon passed from No 1 (Bomber) Group to No 6 Training Group, and then moved to France as part of the British Expeditionary Force in the spring of 1940. They were restricted to reconnaissance duties and by May they had re-equipped with the Mk IV. Outside the UK there were seven Blenheim Mk I units at the outbreak of war. Four of these – No 30, 43, 55 and 213 Squadrons – were the first to become operational in North Africa. A mix of Mk I and Mk IV Blenheims from 43, 55 and 113 Squadrons bombed El Adem the day after Italy declared war, on June 10 1940. Out of 26 aircraft participating in that raid, three failed to return, but by the end of the day the African Blenheims had destroyed 18 enemy aircraft on the ground.

Their next onerous task was to counter the Italians in the invasion of Greece. No 84 and 211 Squadrons transferred their Blenheim Mk I from North Africa at the end of October, accompanied by No 113 and 11 Squadrons equipped with the Mk IV. There they experienced heavy losses during intensive air battles, especially when Germany stepped in to rescue the Italians from the mess they had landed themselves in! When Greece surrendered at the end of April 1941, remnants of these units returned to Egypt and Palestine, by which time the older marks of Blenheim practically disappeared from use.

Far East units continued to fly the Blenheim Mk I (both bomber and fighter versions) much longer. At the end of December 1941, No 27 and 62 Squadrons in Malaya still had 23 examples on strength between them, while No 60 Squadron in Burma had four of its aircraft operating in there and eight stationed at Kuantan (Malaya). These units were practically decimated in their gallant but vain attempt to halt Japan's invasion of Malaya and Singapore.

Meanwhile, the spacious interior of the Blenheim proved useful in pioneering the installation of A.L Mk.III airborne radar equipment for night interception. For this purpose, a special flight of three Blenheims was formed within No 600 Squadron, operating from Manston as part of an extensive operational development programme. Five Luftwaffe bombers were



Bristol Blenheim Mk I, L8372 of No 29 (F) Squadron, coded YB-L, during Air Defence Exercises held in July 1939. All black undersides except for the starboard wing. This print is a censored copy, as other scales clearly show the full serial painted in white under the wing. (I. J. Cawsey Archives)

shot down on 18 June by moonlight, while on 3 July a Blenheim Mk I of the Fighter Interception Unit based at Ford scored its first night kill through the aid of radar equipment.

In Foreign Colours

Finnish interest in the Blenheim materialised in an order for 18 examples in October 1936. Airframes 8137-8154 (BL-104 to BL-121) were modified to take Swedish bombs, and began to leave Filton

in July of the following year. A production licence was acquired by the Finnish Government, with plans to produce the Blenheim at a new factory at Tampere, but none had been built before the Winter War had started in November 1939. The original Filton-built aircraft went into action with LeLv 42, 44 and 46, and were known in service as Blenheim Series I (to distinguish them from the Mk IV which was designated Series II).

Finland requested further supplies from UK to supplement its small over-worked Blenheim force, 24 examples being delivered from RAF stocks. Production of the Blenheim continued during the second Russo-Finnish conflict with 15 Mk Is being completed during 1941, and by the time of the final armistice of 1944, a further 30 machines had been built. In addition to the units already mentioned, the Blenheim also served with LeLv 49 and T-LeLv 17 (the latter being a training unit).

After acquiring two pattern machines (8514 and 8815, coded L160 and 161 respectively), Yugoslavia became the second country to produce the Blenheim under licence. This initial pair were followed by a further consignment of 20 ex-RAF machines early in 1940. The first Yugoslav example flew in March 1939, and when Germany invaded that country in the spring of 1941, Ikarus had already delivered 16 Blenheims from its factory at Zemun, while 24 others were at various stages of construction on the production line. Yugoslav partisans ensured that these aircraft did not fall into Axis hands by sabotaging the Zemun plant. Those in service were assigned to the 1st and 8th Bomber Regiments and the 11th Independent Group, performing attacks against German armoured columns flowing into Yugoslavia through Bulgaria, also mounting some daring offensive raids against targets in Hungary and Austria. The few examples which survived the bitter fighting were eventually passed on to the Croatian Air Force.

Other exports of the Blenheim Mk I included an initial batch of twelve examples to Turkey, with the first pair being shipped in October 1937 while the rest were delivered in March-June 1938;

FS.595 Equivalents

Colour Translation RAF/RM

Sky Grey	36461
Medium Sea Grey	36270
Dark Sea Grey	36173
Extra Dark Sea Grey	36118
Extra Dark Sea Green	34092
Dark Grey (mixed Grey)	36173
Ocean Grey	36152
Dark Green	34079
Dark Earth	30118
Sky	34424
Grey-green (interior)	34227
Ident Red (full)	30109
Ident Blue (full)	35044
Ident White (full)	37778
Yellow (trainer)	33538
Night	37038
Dk. Mediterranean Blue	35053
Azurine Blue	35281
Sky Blue	35622
Dark slate Grey	34096
Grey-green (interior)	34226/34227

Finland

Tummanruskea Brownish Green	30277
Tummanvihrea Grey-Green	34159
Olivinkreila Dark Olive Green	34096
Vikrea Dark Green	34258
Vali Sinen It Underside Blue	35414
Hoppeannharmaa It Underside Grey	36559
Vaal Harmaa Very Light Grey	36492
Musta Black	37083
Punainen Ident Red	31302
Keltaiset Ident Yellow	32655
Sirinen Ident Blue	35012

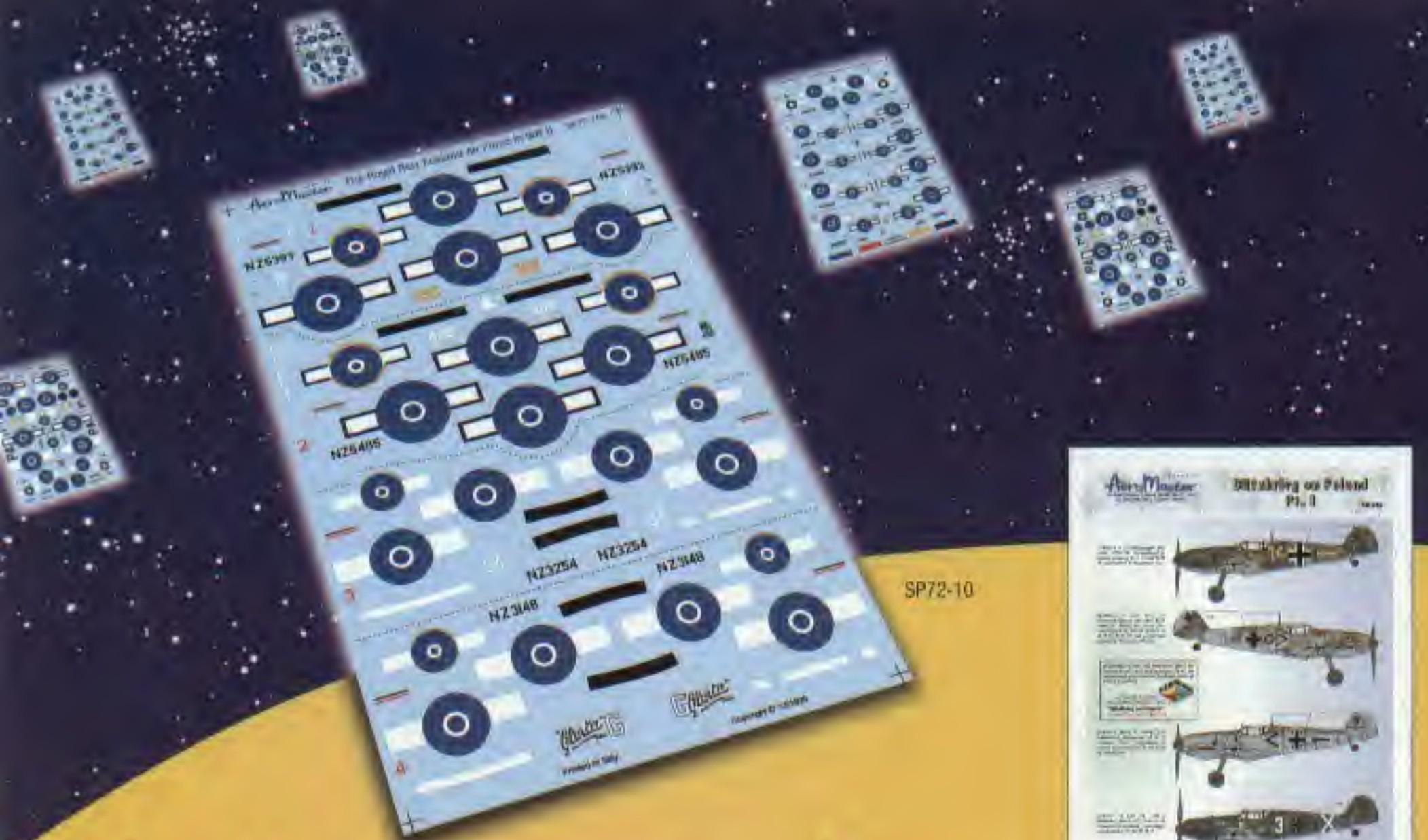
this was followed by a second order for 18 machines which were all delivered by March of 1939. Finally, the supply of 13 Avro-built Blenheims Mk I to Rumania formed part of a diplomatic move, an attempt to entice that country away from the Axis fold which, however, failed.

Although the Bristol Blenheim Mk I was nearing obsolescence as a bomber by the outbreak of the Second World War, it was only a first step in a series of developments which resulted in the much improved Mk IV, its direct cousin the Bolingbroke, together with distant – though equally recognisable – relatives such as the Beaufort and Beaufighter. The Mk II was still fighting the Japanese in Burma as late as March 1942, while those of the Finnish Air Force were only retired in 1956.

Richard J. Cornwell



Blenheim Series I of LeLv 42 Finnish Air Force, seen in 1941. Originally these aircraft retained the original Dark Green/Dark Earth/Night upper surfaces, although they had by this time been repainted in the Dark Green/Light Blue/Light Blue typical of this air force. (I. J. Cawsey Archives)



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48-490 Storms in the Sky Pt XI

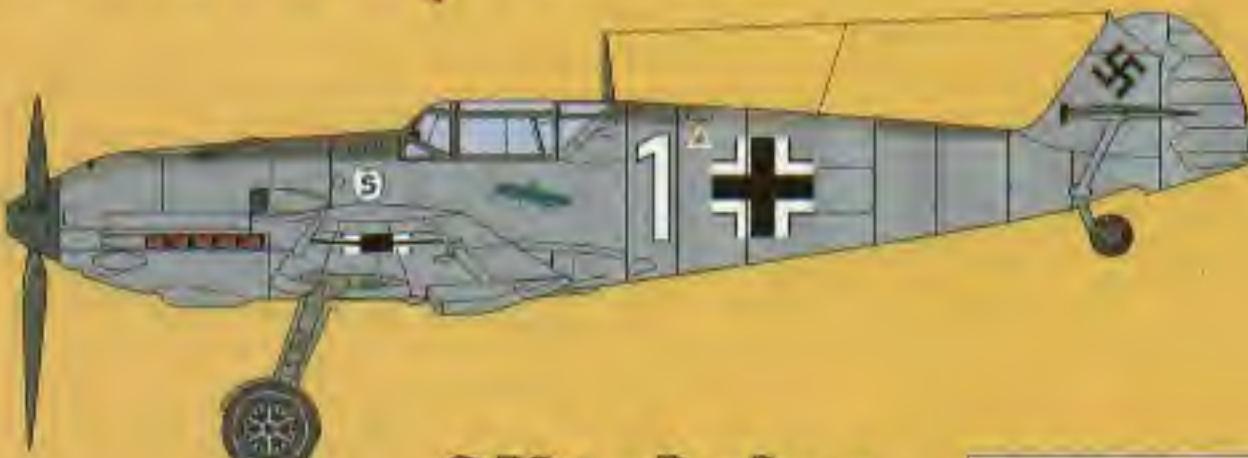
- 1 HH-W No. JP496, Typhoon Mk IB of No. 175 Sqn, September 1943.
 - 2 TP-Z No. MM987, Typhoon Mk IB of No. 198 Sqn, Manston, March 1944
 - 3 JB-II No. PD521, Typhoon Mk IB of No. 146 Wing, Antwerp, November 1944.
 - 4 EDM No. SM228, Tempest Mk V of No. 122 Wing, Fasberg, May 1945.

48-491 Storms in the Sky Pt XII

1. FM-A No. JP510, Typhoon Mk IB of No. 257 Sqn, Warmwell, August 1943.
 2. DJ-S No. R8843, Typhoon Mk IB of Tangmere Wing, September 1943.
 3. JJ-F No. EJ762, Typhoon Mk V of No. 274 Sqn, Volkel November 1944
 4. SA-M No. SN129, Tempest Mk V of No. 455 Sqn, Fassberg, May 1945.

48-493 Last of the Breed BF109 K P1 II

1. Bf109K-4, II./JG3, March 1945.
 2. Bf109K-4, Stab II./JG 52, March 1945.
 3. Bf109K-4, WrNr. 334265, found abandoned at Amberg Airfield
 4. Bf109K-4, Stab III./JG 53.



Blitzkrieg on Poland

48-494 Last of the Breed BF109 K Pt III

- 1: Bf109K-4, II/JG 53, Kaufbeuren, April 1945.
 - 2: Bf109K-4, of an unknown unit (perhaps JG 27).
 - 3: Bf109K-4, III/JG 53, May 1945.
 - 4: Bf109K-4, III/JG 27, Germany, April 1945.

48-496 Blitzkrieg on Poland Pt I

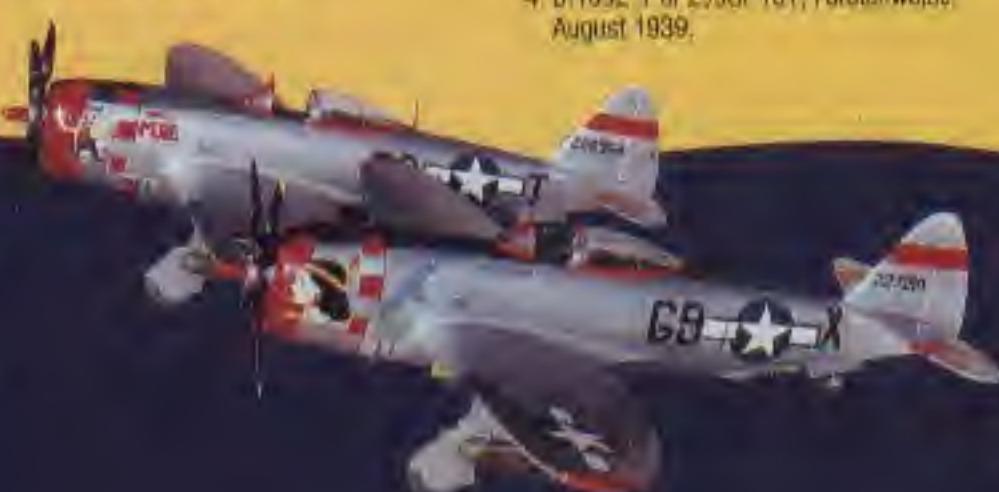
- 1: Bf109E-1 of 5.(J) Trägergruppe 186, winter 1939/1940.
 - 2: Bf109E-3 of Stab 1/JG 53, Weisbaden-Erheim, November 1939.
 - 3: Bf109E-1 of 1.JG 131 (1./JG 2) Röchling, March 1939.

48-497 Blitzkrieg on Poland Pt II

- 1: Bf109D-1 of 2/JGr 176, Gablenz, August 1939.
 - 2: Bf109E-1 of 5/JG 77, Jever, December 1939.
 - 3: Bf109E-1 of 1/JG 26, Dortmund, December 1939.
 - 4: Bf109E-1 of 2/JGr 101, Fürstenwalde, August 1939.



4B-497 Blitzkrieg on Poland
BF109D/E Pt II



The Finishing Touch

Featured this month is a SP48-11/12 Thunderbolt of the 405 FG, by Norris Graser

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48-491 Storms in the Sky Pt XII



48-493 Last of the Breed BF109K Pt II



48-494 Last of the Breed BF109K Pt III



The Royal New Zealand Air Force In WW II



SP72-10 The Royal New Zealand Air Force in WWII

- 1: F4U-1 Corsair BuNo. 50182 NZ5390, No. 25 Sqn, Los Negros Island, January 1945.
- 2: F4U-1 Corsair BuNo. 57473 NZ5485, Kohimarama IX, No. 23 Sqn /5 Servicing Unit, St Matthias Islands, August 1945.
- 3: P-40N 43-23245 Warhawk NZ223148, No. 215 Sqn /2 Servicing Unit, New Georgia, October 1943.
- 4: P-40N 42-104752 Warhawk NZ2354 Gloria Lyons, No. 4 Servicing Unit, Dindonga, December 1943.
- 5: PBY-5 Catalina BuNo. 08467, No. 6 (Flying Boat) Sqn as NZ4017, New Hebrides Islands, February 1944.
- 6: PB2B-1 Catalina, BuNo. 5 (Flying Boat) Sqn as NZ4033, Segond Channel, late 1944.
- 7: TBF-1C Avenger BuNo. 47736 NZ2518 Plonky, No. 30 Sqn /30 Servicing Unit, Bougainville, May 1944.
- 8: TBF-1C Avenger BuNo. 47858 NZ2525 No. 30 Sqn /30 Servicing Unit, Bougainville, April 1944.
- 9: SBD-5 Dauntless BuNo. 36995 NZ5048 No. 25 (Dive Bomber) Sqn, Bougainville, April 1944.
- 10: SBD-5 Dauntless BuNo. 28516 NZ5060

No. 25 (Dive Bomber) Sqn, Bougainville, April 1944.

- 11: SBD-5 Dauntless BuNo. 238891 NZ5047 Carbonium N. Barstadium, No. 25 (Dive Bomber) Sqn, Bougainville, April 1944.
- 12: SBD-5 Dauntless BuNo. 36925 NZ5057 Howa Bout That! No. 25 (Dive Bomber) Sqn, Bougainville, April 1944.

32-005 Korean War MiG Aces Pt I

- 1: MiG-15 bis Chinese Sqn Commander, Chinese Military Air Force, 1953.
- 2: MiG-15 bis Russian 176 IAP/3241AD, 1952.

3: MiG-15 bis Russian 196th FAR group, 1951.

4: MiG-15 bis Russian Karelion Sqn, 351 IAP, Feb 1953.

32-005 Korean War MiG Aces Pt II

- 1: MiG-15 bis 726 IAP/133 IAD, 1952.
- 2: MiG-15 bis, April to July 1953.
- 3: MiG-15 bis belonging to the Chinese Peoples Liberation Air Force, Korea, 1950-1953.

KOREAN WAR MIG ACES



Stencils



148-011 Hurricane Stencils



32-005 Korean War MiG Aces Pt I



32-006 Korean War MiG Aces Pt II

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Modelling The Hi-Tech Breguet 14B2

by Dai Williams



Construction

Construction started as usual with the fuselage. I thought that there were a few things that could be improved in this area. The major improvement necessary was the inclusion of the trap doors and windows on the underside of the fuselage. I assume that these features were left out in order to simplify the production of the kit though no mention is made of them in the instructions. These would be visible from both the inside and the outside of the finished model so I considered that merely reskinning the lower fuselage with card would not do here. I removed the bottom of the fuselage entirely, electing to scratch build the floor to include the

The Hi-Tech kit is a typical multimedia limited run offering. The wings, tail and fuselage are presented in grey plastic. This has a somewhat unpolished appearance. There is flash to deal with on most of the plastic parts but this is not a great problem to remove. There is a metal fret (nickel plated brass) which contains many of the smaller parts and some impressive looking engine louvres. The propeller, guns and undercarriage legs are in white metal. There is also a set of resin parts providing the wheels, radiator and exhaust. A sheet of transparent plastic is provided for the windows and windscreen. A fine set of transfers from AeroMaster is also included.

windows and doors.

The holes in the large louvres over the engine compartment should have revealed the interior detail. I therefore removed most of the plastic from the areas backing

these parts leaving just enough to attach the etched metal covers. There are two small grills behind these on each side but I felt that removing plastic in these areas would have left nothing onto which to attach the metal parts. They were therefore left alone with an impression of depth behind these being provided by a wash of dark oil paint. Inside the fuselage the area around the fuselage windows was thinned considerably to attempt a scale representation of the fabric covering.

The fuselage halves were then joined and the cowling added to give an open box structure ready for interior detailing.

There were large gaps in the fuselage joints which had to be filled with strips of card. These were fixed with thick superglue quickly hardened with an accelerator. This also acted as a filler. There was some refinement of the cockpit areas necessary - notably to give a round

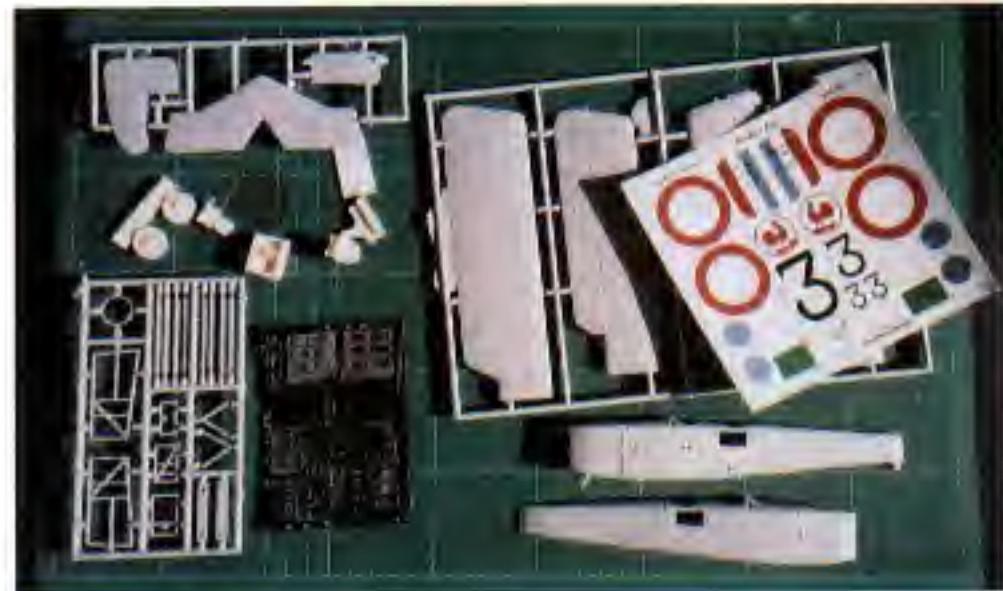
Technical Data

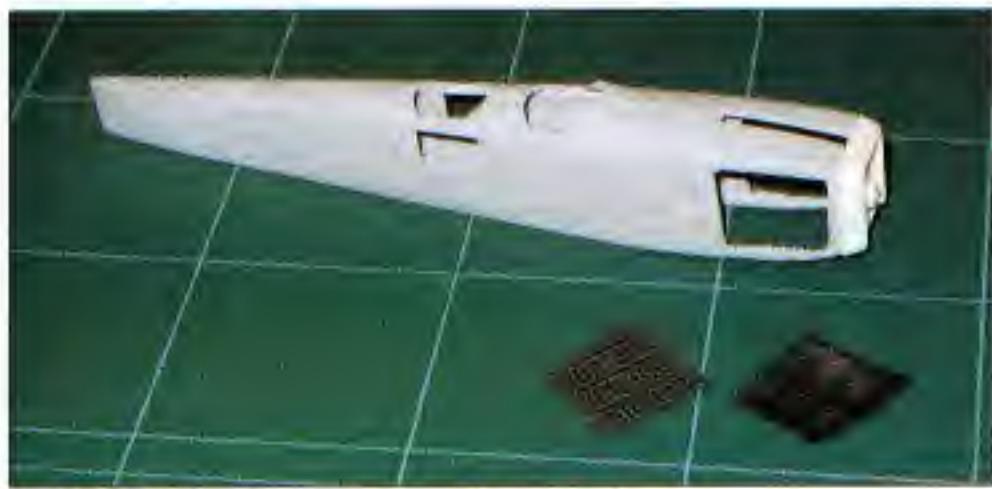
Scale:	1/48th
Price:	£22.50
Kit No.:	HT 003
Panel Lines:	Recessed ✓
Status:	New Tooling ✓
Type:	Limited-run Injection Moulded Plastic, White Metal, Resin & Etched Brass
Parts:	27 Plastic (Light Grey), 7 Metal, 6 Resin, 34 Etched Brass
Decal Options:	1 (Escadrille BR 117)
Manufacturer:	Hi-Tech Models
Obtain in UK via:	Hannants



a section as possible to the rear cockpit. Constructing the fuselage in the way that I did allowed the messy filling, filing and sanding to be done before any of the fiddly internal detailing making the job much easier. Note that the inside of the fuselage join also had to be cleaned up as this would be visible from below.

I was lucky enough to have been supplied by the Editor with a considerable amount of reference material from Harry Woodman. This was invaluable when





The fuselage halves have been joined and the engine opening cut away



Detailing of the fuselage interior has started

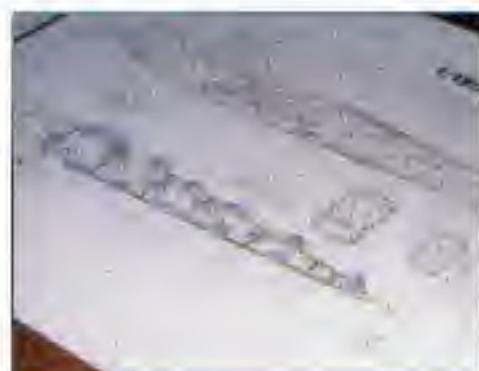
detailing the inside of the fuselage, which I did from the outside inwards. The first things to be added were therefore the stringers that would have been visible from the outside next to the fabric. These were represented by thin brass rod down the sides of the fuselage and also across the underside of the rear decking.

The interior fuselage structure is represented in the kit with flat-section plastic and etched metal. The real aircraft structure was based on a tubular

framework. With constant reference to the internal drawings, photos and the exterior features of the kit parts I constructed the interior framework. This was done with Evergreen 0.75mm plastic rod attached to the inside of the fuselage. I could not get the etched instrument panel to fit into the fuselage so I replaced it with a structure made from 20 thou card to be detailed when in place. The detail within such as the pilot's and observer's control columns as well as the complex looking linkage between them were made from smaller section plastic rod and brass tube. Other details such as the pilot's footboards, the door opening mechanisms etc. were made from some of the metal parts included in the kit, likely looking bits from the spares box, brass tube and Grandt Line nuts and bolts.

When detailing the inside of the engine compartment I bore in mind that very little would actually be visible inside the finished model. All that was necessary here was the impression of something large and metallic in the empty space and some internal structure to hold it up. I used an engine from my spares box but you could probably get away with a shape made from scrap plastic and 6 cylinder heads from thick rod. The exhaust was fitted at this stage to ensure that it appeared in the correct position above the fuselage. The resin casting here was flawed and I built up the missing areas with gap-filling superglue again hardened with an accelerator and filed to shape after drying. The exhaust opening was carefully bored out with a small burr in a motor tool.

The internal structure was starting to look a bit complex now and I could see a difficult painting job coming up. I therefore elected to build and paint the



The cutout in the undercarriage fairing was opened up by first drilling a series of small holes, then cut between these with a sharp blade



The opening in the undercarriage fairing sanded up with sandpaper

pilot's seat, the observer's rather complex seating arrangement and other internal details such as a petrol tank as separate assemblies to be added after the interior was painted.

The front and top of the fuselage interior were airbrushed with red/brown to represent plywood. This was masked and the rest of the interior was airbrushed with Tamiya Deck Tan to represent the interior fabric. This was not an easy operation as the masking process was exceedingly fiddly and airbrushing in such an enclosed area with so many structural members at all sorts of angles did not give a result that was as neat as I had hoped. The painting of the internal framework was done by brush using Humbrol Aluminium. To allow easier cleanup of the inevitable mistakes I airbrushed a coat of Johnson's Klear inside to give a gloss finish. This could be deadened with matt varnish later on. The stringers were drybrushed with metallic enamel; again not particularly effective in this enclosed space.

The bottom of the fuselage was fabricated from a single sheet of 10 thou clear plastic cut a little larger than the fuselage opening. The rear section of the fuselage seems to have had a convex surface (though not as pronounced as the top). This was replicated by gently bending over a piece of brass rod. Openings were cut for the bomb doors using the drawings supplied by Harry Woodman. The areas where the windows would be was masked and the front of this structure was sprayed to represent plywood and the rear to represent fabric as for the rest of the fuselage. Interior stringers were added from thin steel wire rolled under a ruler to straighten it. The grill on the lower front of the fuselage was

attached and the fuselage bottom was then offered up to the sides and attached with thin superglue. This was run carefully along the join using an absolute minimum to avoid fogging the transparent plastic. I then trimmed the plastic to fit and sanded it smooth. There was an opening at the rear for the tailskid so the floor stopped short of the tailpost to represent this.

The external fuselage details were then added. I started by removing the lacing detail which looked a little unconvincing even after being rubbed down. This was replaced by thin strips cut from a piece of Verlinden plastic mesh with a sharp scalpel blade. This was then added to the fuselage and blended in with several coats of Liquid Poly. I ensured that this was securely attached to avoid it being peeled away along with the masks during painting. If you can't get any of this then you may be able to substitute brass mesh or bits from net curtains. An alternative would be pressing a razor saw blade into tin foil at an angle to get a zig zag pattern and using strips of this attached with superglue.

The side windows were added using the



The observer's folding seat was built from this card



The observer's seat has been added



The makeshift engine - the tops of the cylinders have been lathed up with disks cut with a pin vice and die set, and the exhaust added (note the flawed casting)

thinnest section clear plastic I could find. After adding the etched window frames I realised that it would have been more sensible to use clear plastic that was nearer to the thickness of the fuselage to present a flat surface for the etched parts but once everything had set I feared making a mess by removing the frames and windows and starting again.

Filler caps for the petrol tank and radiator were made from plastic rod topped with disks of plastic cut out with a punch and die set (these are expensive and delicate tools but I find mine indispensable). I added some more mesh to the front of the engine grill and installed the etched radiator louvres. These give a fair representation of the actual appearance but purists may decide to replace these.

The stringer detail on the top of the fuselage had been removed when the joint between the two halves was cleaned up. I therefore replaced it with thin plastic rod blended in with Liquid Poly. The rod was rubbed down when dry. The same was done on the bottom half of the fuselage.

The tailplane and fin/rudder were then added. The fin needed some carving and sanding for a neat fit and filling with

watered-down white glue to cover the fin to tailplane joint. I added a small piece of rod to represent the bar that would have run between fin and rudder in the rudder cut-out and a small piece of shaped card for the strengthening plate on the fin.

Wings & Undercarriage

The two halves of the top wing were joined but the heavy mouldings supplied in the kit for the centre section were discarded. The centre of the wing was taped to the workbench and the ends raised on scrap plastic to provide dihedral. I skinned the joint with 5 thou card and added more sliced mesh to represent lacing between the wing and the centre section.

There were bungee chords attaching the lower wing flaps to the main wing. This gave the flaps a pronounced droop when the aircraft was on the ground. I drilled small holes in the wings to accept small pieces of rod to represent these after the wings were painted and the transfers applied.

It is recommended that wire is used to strengthen the joints - the wings are heavy and would benefit from the extra support. However on the full size aircraft the wings

did not have spars that entered the fuselage, they were hung on the lower longerons. Had I added spars they would have been visible inside the fuselage. The lower wings were therefore butt joined to the fuselage - the joint being reinforced with superglue. I used the swept back top wing as a reference here as the sweep on the bottom wings had to match up with this rather than any drawings.

Etched parts are provided for the bomb racks. However none of the large array of bombs and flares that could be carried are provided, nor are the attachment points. However it should not be beyond most modellers to make some of these up from spare tube and card if required.

Conventional wisdom dictates that when building biplane models, the airframe is painted and the transfers applied before the top wing is fitted. Being a limited run kit and having hacked it about in a major way I thought that I might have had problems aligning the top wing. Fiddling around here once the airframe had been airbrushed would have damaged the paint finish so I elected to attach the top wing before painting. A makeshift jig constructed from bits of cardboard was used to support the model

while the top wing was attached. The strut attachments were reinforced with superglue when the correct alignment was achieved.

I next cut out a vision slot in the undercarriage fairing and tidied up the opening with plastic strips rubbed down when set. Not all aircraft had this opening so check your references if you decide to depart from the kit colour scheme. The main undercarriage is presented in white metal. It is not a very refined moulding with the attachment sockets at the top and bottom of the legs not being represented. I drilled small holes in the lower fuselage to accept the undercarriage legs. The model is very heavy so a simple butt joint will not do here. The tailskid is also in white metal and again is not very refined. I fabricated a new one from laminations of Evergreen plastic strip.

Painting

The interior of the fuselage was masked with damp tissue and the windows were masked with tape and Humbrol Maskit as appropriate. I undercoated the airframe with an airbrushed coat of Tamiya grey acrylic. I did not use the more popular Halfords primer here as the spray can was



Stringers were added to the top of the fuselage. The streaked appearance is due to overspray from the painting of the interior



Inerior detailing: visible here are the brass rod stringers on the fuselage sides and some of the framework. Brass rod was used when necessary to preserve the fuselage cross section.



The fuselage floor in place. The interior and windows are masked ready for painting



An instrument panel has been added. Note the white plastic used to fill the gaps along the top of the fuselage. The moulded lacing has been rubbed down - but this was later removed and replaced.



The joint between the two halves of the upper wing was skinned with 5 thou card and more lacing added



Verlinden mesh was cut into strips and used to represent lacing



The gun mounting under construction. I have managed to bend the gun sight out of shape - to be corrected later



Harry Woodman's etched parts for the rear gun mounting

not suitable for getting into all the various nooks and crannies of the assembled model.

Painting started with a coat of white on the tail fin ready to accept the kit transfers. The green squadron marking was also sprayed instead of using the kit transfers. There is nothing wrong with the kit transfers but I just find it easier to paint markings where I can. The lower fuselage was given a coat of Humbrol Aluminium lightened with Matt White. The airbrushing of the camouflage scheme was done with various AereMaster and Tamiya acrylics. Since the top wing was in place the masking that had to be done to achieve this was difficult and fiddly. I used Tamiya tape for most of this and the masks had to be removed extremely carefully to avoid pulling the model to pieces. There were inevitably oversprays here which had to be corrected with a paintbrush as it was not possible to burnish the tape down thoroughly on the assembled airframe. The model was airbrushed with a few thin coats of Juhuso's Klear to seal the paint coats and to provide a gloss base for the decals.

Decals

These are of very high quality being thin enough to conform to the surface detail

but having enough colour density to cover the darker paint coats with nothing showing through. I experienced a problem with the fin stripes in that they were too small to cover the whole fin. Normally I would have sprayed the fin stripes. However the serial numbers and codes were printed on top of the fin stripes meaning I had to use the kit transfer and had to touch up around the edges of the fin with paint. The fuselage transfers were omitted at this stage as the model would have to be handled a lot when applying the rigging and I feared marking them. In order to keep things in register the blue centres of the roundels are printed separately. Ensure that the underlying roundels are perfectly set before applying these. I would not recommend using softening agents on these transfers. I thought that the small rectangles representing patches over bullet holes (complete with German crosses) were a nice touch and applied a few more of these than were strictly necessary.

Final Details

Detailing continued with a series of control horn like attachments for the bungee chords under the lower wing. These were cut from thin Evergreen strip. Unfortunately they

have to be stuck over the wing transfers which does not make for a strong assembly but this cannot be avoided. The bungee chords themselves were represented with thin rod painted grey.

The radiator grill was painted in Humbrol Gunmetal and treated with a wash of black oil paint followed by drybrushing with Humbrol Aluminium. All of the struts were metal rather than wood so they were given a coat of aluminium. Details around the model such as the lacing and panel lines were given a thin wash of Burnt Umber and Black Oil paint. The instrument panel was detailed with brass bezels from various old etched sets (by Reheat as I recall). There is a decal provided for a map attached to the panel. I cut this out of the sheet and applied it complete with its backing paper. The windscreens were added from thin clear sheet and fixed with white glue.

The bomb doors were made from 10 thou card detailed with thin strip. I painted these in buffable gunmetal paint and polished them to represent unpainted metal. As I had gone to all the trouble of detailing the inside of the fuselage I attached them in the open position.

References show that there were three

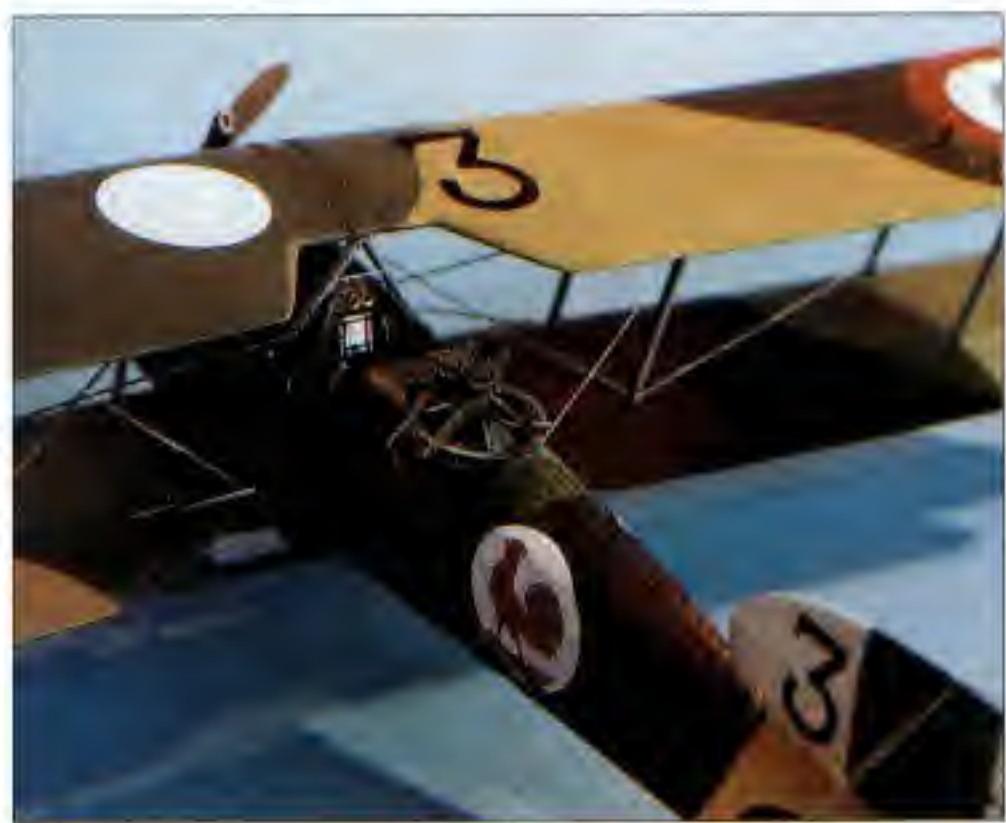
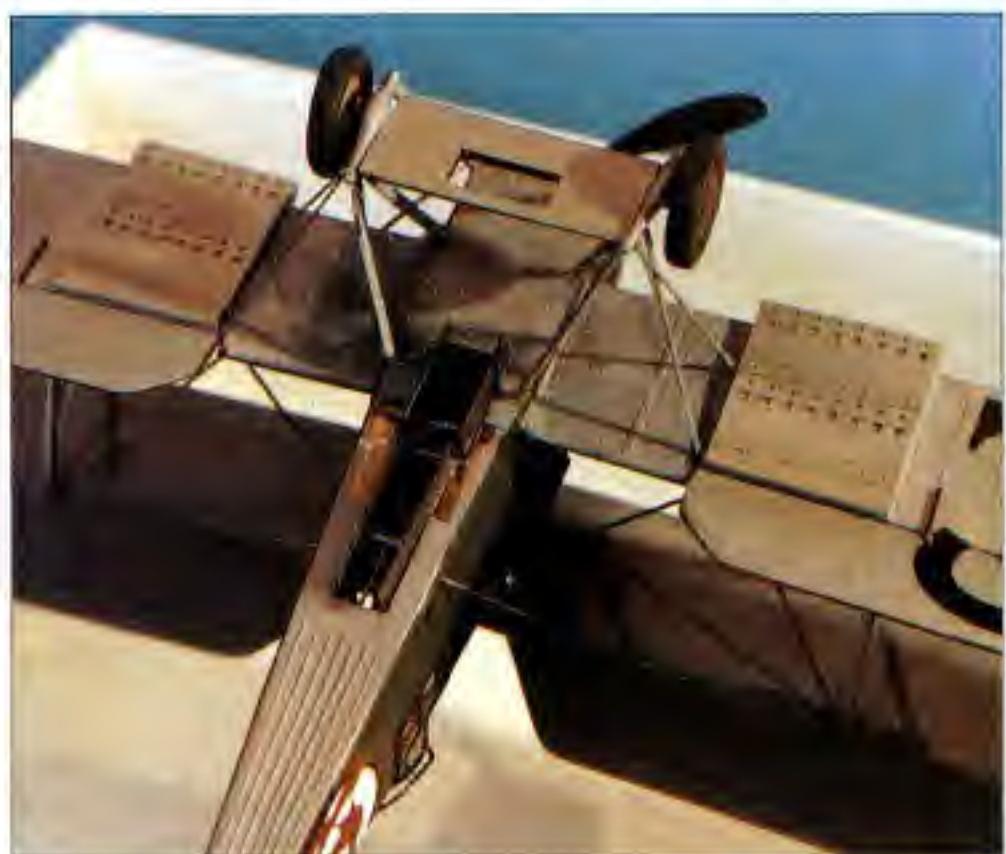
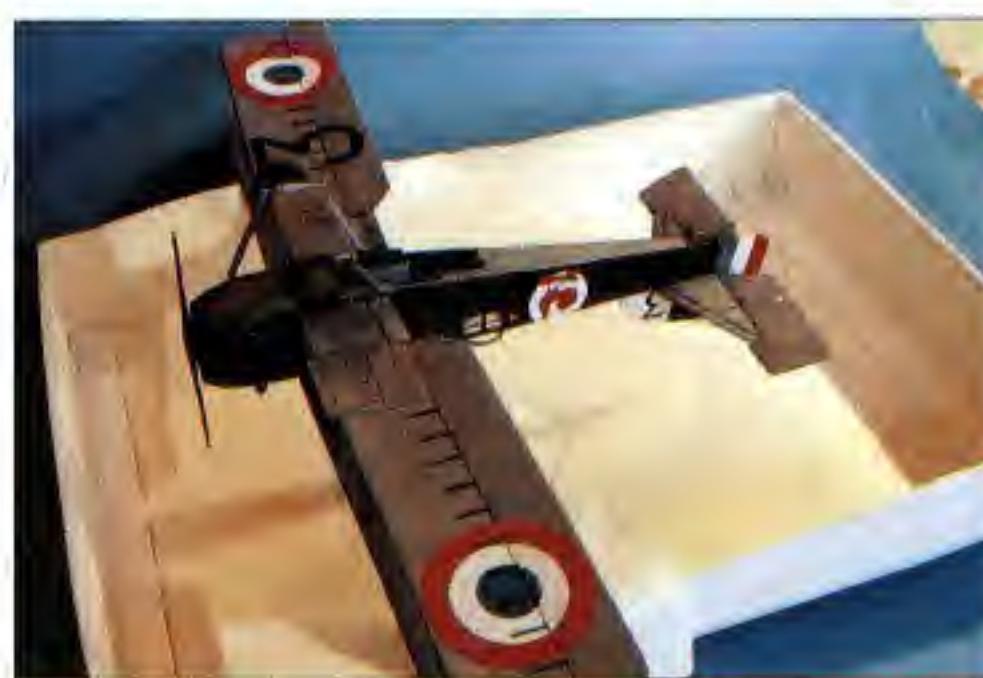
distinct types of rigging wire used on this aircraft. There were single pieces of wire in two thicknesses, and double wires bound together with fabric. The single wires did not present a problem requiring only that two thicknesses of steel wire were used. I had a number of attempts at representing the double wires - trying to get something that looked flat when completed. After various failed attempts at sticking together lengths of steel wire and brass rod, and sawing up piano wire I resorted to using thin plastic strip painted grey. I did not think that this was a particularly successful representation but could find no practical alternative.

Now at a stage where the model did not have to be handled much the fuselage transfers were added along with the rear guns.

The mounting on the aircraft modelled was a copy of the British Scarff mounting. Note that other aircraft had a different mounting of French design; again check your references if you decide to deviate from the kit scheme. Late on in the project I was supplied with some etched brass parts for the rear gun mounting from Harry Woodman. These parts were designed for modelling this aircraft back



General views of the completed model



in 1976! They were far more delicate than any commercially available etched parts that I have encountered in my travels so far. The arcs supporting the guns even had the minute teeth and lightening holes of the original. I felt a sense of responsibility when assembling the gun ring - feeling that making a mess of things here was really not an option. I assembled the brass parts with the thinnest superglue I could find. The bar supporting the guns was fabricated from brass rod. The Lewis guns supplied are not the kit's strongest point and do not look like the license built items on the real aircraft - not having the wooden fairing under the barrels. Guns from Aeroclub were substituted. While these are also of an incorrect pattern for the Breguet they at least look a bit better. I hope that my attempts at using these incredibly fine parts did justice to the producer.

The model was given a final coat of satin varnish as a sealer. This also serves to take a little of the shine off the rigging wires. I have discovered that if a flash is used to photograph models of this type the steel wire I use for rigging reflects the light and the wires appear much thicker than they really are.

In Conclusion

This was one of the more complex aircraft modelling projects that I have attempted to date. The fact that the aircraft had windows all over the place made it necessary to make a lot more of the interior than would normally be the case. I probably made the project a lot more difficult for myself than necessary. Building the framework into the fuselage made for a difficult painting job. It may have been more sensible to build and paint the framework separately and then slot it into a prepainted fuselage. The fitting of the top wing before painting made for a difficult masking job. More



trial fitting and the construction of a more substantial jig may have made this unnecessary. There were probably many other more practical and less time consuming ways of achieving the same ends. However you learn as you go along. I enjoy the process of building models as much as the end result. I probably learned a lot more here than I would have if I had built a mainstream kit and will be a lot less reticent about altering kit parts in the future.

While I put a lot of work into building this model with quite a few kit parts being replaced or reworked this does not mean that the Hi-Tech kit is not good - far from it. This is not a kit for the novice but I doubt that it is aimed at anyone apart from the WWI enthusiast with a stock of references at their disposal. The kit is well engineered and as with other 'limited run' kits like those produced by companies



such as Blue Max, a great deal of care, attention to detail and thought has gone into its production. Sensible use has been made of injection moulded plastic, resin

and etched metal within the limitations of these media. If I replaced parts then it was only because I thought it was easy to do so and the finished result would be more acceptable to me (and it would make for a more interesting article than a straight kit build). You do not have to replace and rework things as much as I did to finish the kit. Go as far as you need to have a good time while making the model and to feel comfortable with the end result.

My thanks go to Hi-Tech for the opportunity to build this kit and to Barry Woodman for supplying the reference material and the excellent etched parts.

Dan Williams



Breguet 14B2

Airborne Early Learning

Circuits and Bumps with the Airfix S.A. Bulldog



Introduction

Back in my mis-spent childhood, the Airfix catalogue was awash with all manner of strange aircraft that I, as a devotee of WWII fighters and bombers, would not have touched with a barge pole. The Islander, the Dominic and the Jetstream in particular spring to mind, as my current penchant for contemporary RAF machines cries out for the reissue of all three.

A late addition to the range of unglamorous also-rans was the Scottish Aviation Bulldog, which I first recall appearing in a blister pack in the early seventies. Originally designed by the Beagle Aircraft Company, the Bulldog was taken on by Scottish Aviation, who completed the aircraft's development.

Despite the change of name, the aircraft's lineage is evident in a certain resemblance to the Beagle Basset, another aircraft sadly missing from the current Airfix range, and with my new found addiction to more humble aircraft, I found myself strangely drawn towards the diminutive two-seat trainer.

As the Bulldog is so small, it seemed like a good idea to build two at the same time. I foolishly convinced myself that little extra work would be involved, and that the whole project would be whisked over the workbench in a few short sessions. I had picked up a 1973 issue kit at the Huddersfield show, and finding a more recent boxing still on the shelves of a shop in Newcastle, I was unable to resist the temptation. Both were priced below four pounds; it seems the early release had increased little in value to collectors over the intervening twenty-six years.



The 1990 box



Kit packaging, dated 1973 and 1990



The 1973 blister pack

The Kit

Originally produced in white plastic, the 1990s offering comes in grey. The parts are well moulded, with very little flash, and on the whole look very promising. There has been little loss of detail with the passing of time, and once both models were painted there was no discernible difference between the old and the new. The instructions are concise and clear and it was only sheer inattention on my part that allowed me

erroneously to fit the optional footstep. Wise after the event, I had already taken the photographs before their subsequent removal.

Two colour options are offered: an RAF machine of the Central Flying School, in the standard three-colour trainer scheme, and a Swedish aircraft in a camouflage pattern of green and grey. I decided to build both of mine in RAF colours.



The decal sheets. Left from 1973 issue and right from the 1990 version. Note poor register on the fin flashes and Swedish markings in the 1990 version



Cockpit floor, with control sticks added. The stump for the rear seat needs to be removed



Layout of the 1973 kit parts. Also available in grey!



The exhaust pipes drilled and painted



Propellers acquiring coats of many colours. Strips of decal were later added for the white stripes



First undercoat applied (Humbrol Satin 165)



Painting completed



Various attempts at the UAS badge. The cross was made separately from the backing, as I don't want to risk having to cut out the correct shapes again



Ugh! What a mess! Once this spraying is complete the masking comes off



I always knew there had to be a reason for teaching maths at school!



The morning after the night's decalling. Nose codes on XX550 are Letraset!



Black bits after spraying. If that isn't a fire extinguisher on the central console, then it ought to be.



Awaiting the canopy. Note the unidy groove on the top of the fuselage



Filler is being applied to blend in the transparency

Cockpit Assembly

The cockpit interior is adequate, especially in view of the thickness of the transparencies. Having grown up cementing pilot (1) to seat (2), and finding nothing else but a peg to glue them onto, I am easily pleased where cockpits are concerned. I sprayed the aircraft interiors with Humbrol 165, and applied matt black to the control panels, central consoles and seats. The panels feature excellent raised detail, but I drilled out the dials and filled them with white paint, which shows better through the canopy. The only addition I made to the kit parts were seat belts made from masking tape.

Once the finished assemblies had been dry-brushed and various switches picked out in red and yellow I was able to join the fuselage halves and fit the one-piece upper wing sections, which include the cockpit floors. The fit is good but care should be taken when applying glue, as there is a groove in the top, behind the canopy frame, that will be very difficult to clean up once the cement has worked its will. With hindsight I should rather have cut these away, and stuck pieces of plastic card underneath, as the seam lines were very tricky to resolve.

The canopy and rear cockpit windows

came next. The latter are extremely thick and defy all attempts to see through them. I fixed them in place and masked them before applying the main canopy, as I do not trust myself around Clearfix, and had visions of pushing them inward once it was too late. The main canopy itself, a bulbous single-piece affair, fits fairly well, but it was at this point that I came up against one of the kit's chief defects.

The heavy frame for the sliding section is moulded integrally with the kit's fuselage, while the front windscreens and hood are moulded as one part. This means that an absolutely seamless join is essential between the transparency and the frame. In order to achieve this, a small amount of filler is necessary, and consequently the canopy cannot be left off until after painting. I applied tiny amounts of Humbrol filler all around both canopies with a cocktail stick, and carefully wiped the excess away with methylated spirit as too much sanding in the vicinity of cockpits upsets my digestion, and invariably leads to tears. Filler was required in slightly larger quantities at the cockpit fronts as the transparencies were attached very firmly to their sprues and suffered slightly when removed. Blessedly the deed was done and the canopies masked.

Main Airframe

Wise old modellers had warned me that I would be left with a pair of tail-sitters, as there is not enough room in the nose for the necessary weight. Fortunately this is not true, but the amount of lead needed can only accurately be gauged with the undercarriage in place, as the aircraft has a 'nose up' attitude. With this in mind, I left off the cowling fronts until painting was complete. All that was left to do for the moment, before undercoating, was to add the main undercarriage legs, the lower wings and the blade aerials. A little filler was required at most joints, and a degree of sanding to blend in the wing roots, while the aforementioned grooves on the top of the fuselages needed considerable attention. At this point I elected to remove the moulded strobe lights, which had been reduced to shapeless lumps by the cement, and which would only have suffered further during operations to remove the seam lines. After initial filling and sanding was completed, I drilled holes where the strobes were to be replaced and enlarged them with a round file,



The completed model/models

care must be taken during masking to ensure that you are spraying the red onto a uniformly grey surface. I had left off the tailplanes, to ease things along, and these, together with the panels that fit under the nose, received the

now complete, so I was able to attach the wheels and start stuffing lead into the noses as soon as the paint was dry. Satisfied that the aircraft could stand on their own feet, I returned to the strobe lights.

Into the neat white collars that now sat atop the fuselage, I inserted red painted plastic rods, the ends filed round, and capped them with blobs of gloss varnish. These certainly pass muster as strobe lights, although a transparency would have been better, so I am currently researching the availability of transparent plastic beads for future experiments. Tailplanes were now added, along with exhausts and nose panels, and the pair were given three coats of Johnson's finest prior to decalling.

Decals

Or transfers as we used to call them. Those provided in the kits are very good, although I have to say that the register was poor on some of the 1990 boxing. This seems to be a common problem with Airfix decals at the moment, which is a shame as they actually go on very well. I have found myself all too often obliged to send off for replacements, and although Airfix are very quick to respond with spares, I could do without the bother.

One of the Bulldogs received the 1973 kit's decals, and became XX515 of the CFS. The older sheet did have the edge over the newer ones and positively melted onto the model, leaving little trace of carrier film. I used a little Micro Set, but it probably wasn't necessary. The other aircraft was destined to become XX550 of the Northumbria University Air Squadron, based at Leeming. This necessitated a bit of rummaging through the spares box, but everything I needed was soon found on

one Modeldecal sheet or another, and the only serious piece of work I was faced with was making the UAS badges for the tail. These were made from a spare Matchbox Red Arrows Hawk sheet and some doctored Letraset.

Out came the protractor, the ruler and the pencil. Hunched over the workbench trying to cut out the correct shapes, I was confronted by a sudden fleeting vision of Beppo, my old maths teacher, leering over me with an ironic snarl: "Hatcher", he demanded, "name me the properties of a quadrangle".

Conclusion

On the whole the kit has few problems. Any failings in the finished articles are entirely my own, and not the manufacturer's fault. Airfix are to be congratulated on producing the kits in the first place. Considering its important role in the latter-day scheme of things, the Bulldog has been neglected, overshadowed by the longevity and charm of the Chipmunk - which is a shame as the kits build up into very neat little aircraft, which sit beautifully alongside the Tucano and the Hawks. Given the paucity of types currently in service, no one modelling the RAF in the 1990s can afford to be without at least one. I hope that the remaining stocks of the kit still linger on shop shelves for a while yet, as I saw a very nice black and yellow machine flying over Linton the other day which is simply crying out to be modelled.

No doubt a whole squadron of RAF Update 2000 decal sheets are just around the corner, to furnish me with all I need...?

Gary Hatcher



which produced small 'collars' at the top of the holes. These formed convincing sockets into which the strobes could later be inserted. After two coats of Humbrol Satin 166, with another bout of sanding in between, the main airframes were ready for further painting, with the second coat of grey providing the final colour for the wing centre panels.

Painting

Previous experience with the Airfix Tucano should have prepared me for the daunting task of masking required with the RAF red white and grey scheme. After much ado with the excellent Tamiya yellow tape I was able to spray three fine coats of acrylic white (Humbrol 5130) which, used with care, I find gives a good finish. Another epic bout of masking allowed the same manufacturer's acrylic gloss red to grace the models. This sprays beautifully, but is very translucent, so

same grey undercoat to ensure a perfect match. The final spray job was the matt black anti-glare panels, and with these complete, I was able to peel off successive strata of sticky tape and Maskol to reveal the finished colour scheme in all its glory. Needless to say there were a number of little bleeds that required touching up with a cocktail stick, but on the whole the models were looking pretty smart by now, and to my relief the canopies had blended nicely in with their frames.

I cannot praise too highly the virtues of the humble cocktail stick, I use them for everything, and while various coats of paint were drying on the aircraft, I had superglued most of the smaller components onto these versatile implements and painted them in their respective colours. The exhaust pipes had been drilled and painted with my favourite mix of matt black, silver and antique bronze. Pitot tubes, undercarriage and propellers were



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Hawker Sea Hurricane Mk IIc, NF694, No. 824 Sqn, Royal Navy

by Mark Stanton



eduard
PLASTIC KITS



Introduction

During World War Two, The United States Navy had the luxury of manufacturers, such as Grumman and Vought, designing aircraft specifically for sea operations. Both of these great names are still synonymous with providing the US Navy with aircraft such as the F-14 Tomcat and A-7 Corsair.

The British Navy, however, rarely had the luxury of specific aircraft designed for its Fleet Air Arm. Ironically, Grumman supplied both the Wildcat and Hellcat to the FAA under the lend-lease cooperative scheme that existed between the United Kingdom and the USA. With the notable exceptions of companies such as Fairey, who have had a long association with the FAA, and aircraft such as the de Havilland Sea Vixen and Sea Hawk, specifically designed, carrier-borne aircraft were few and far between. But not all was lost as many British aircraft types operated by the Royal Air Force were thought suitable for conversion to carrier-based aircraft.

During WWII, the FAA lacked a definitive fighter, whereas the RAF operated the Hurricane and Spitfire. In fact both of these aircraft were modified to become the Sea Hurricane and Seafire respectively. The history of the Seafire has been better

documented and in keeping with the British tradition of supporting the underdog, I thought I'd have a go at producing a Sea Hurricane, as operated by No. 824 Sqn, Royal Navy, during the latter stages of WWII.

History

The particular aircraft that is featured here is a Sea Hurricane Mk IIc operated by No. 824 Sqn FAA, from HMS Striker. HMS Striker began her career as Prince William (AVG-19), a converted C3 hull laid down by the Western Pipe and Steel Company, California, on the 15th December 1941. She was designated for transfer to the United Kingdom under the Lend-Lease agreement. Although initially delivered to the US Navy on the 28th April 1943, it was not until the following month



Model Design Construction's resin conversion set for the Sea Hurricane. The detail on these sets is really superb!

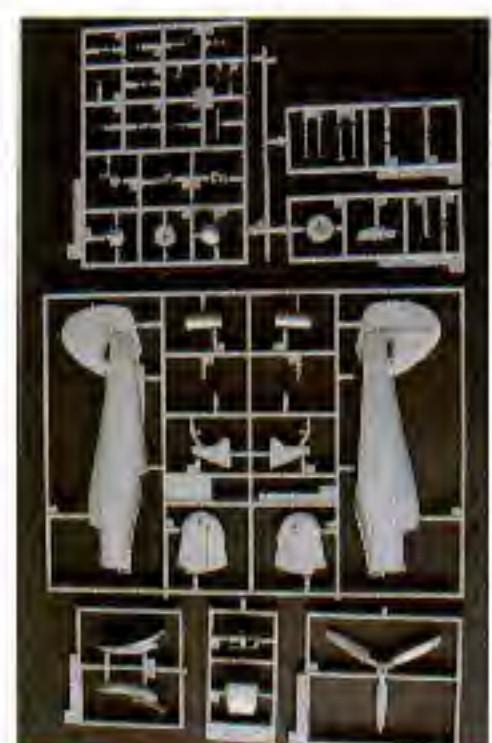
that she was transferred to the Royal Navy, on the 18th May 1943 and re-designated CVE-19 on the US Navy List. She served with the Royal Navy throughout the remainder of World War II and was returned to the US Navy, at Norfolk during February 1946; struck from the Navy List, 28th March 1946; and sold to the Patapsco Steel Scrap Co. and

scrapped. Incredible what you can find on the Internet!

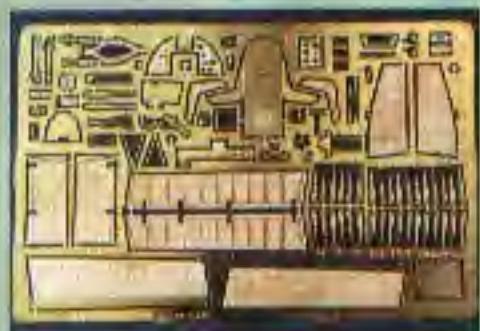
Sub-Lieutenant P.A. Clark flew sea Hurricane Mk IIc, NF694, in June 1944 and although the aircraft was painted in the standard FAA markings of the time, the pilot's



Half of the main components of Hasegawa's 1/48th Hawker Hurricane Mk IIc. In this case the S.E.A.C. version, kit number JF152



The remaining components. As in most kits these days, the sprues are identified by a letter with each individual part being numbered on the sprue



Eduard's etched brass detail set 48-232 for the Hasegawa Hurricane Mk. II. The cockpit details of this set are duplicated on Czech Masters detail set



The film negative instrument panel from Eduard's detail set. The use of these is mandatory for a good representation of the original.



The resin replacement control surfaces from Aires



Kendall's resin flaps that are certainly easier to use than constructing the flaps from Eduard's etched brass set



The Czech Master resin cockpit detail set. The detail and quality of the set is fantastic and I can't help but wonder how they create these sets!



As can be seen on this view of the etched detail set that is included in Czech Master's detail set, the etched parts are very similar to those found in Eduard's set



Construction starts with the careful use of a razor saw and scribe. The lower portion of the rear fuselage is cut out to accept the MDC replacement



The rear fabric section of the lower wing is cut off, again, so the resin rear fuselage insert can be placed correctly



The completed cockpit area. It seemed a shame to put any paint on it!



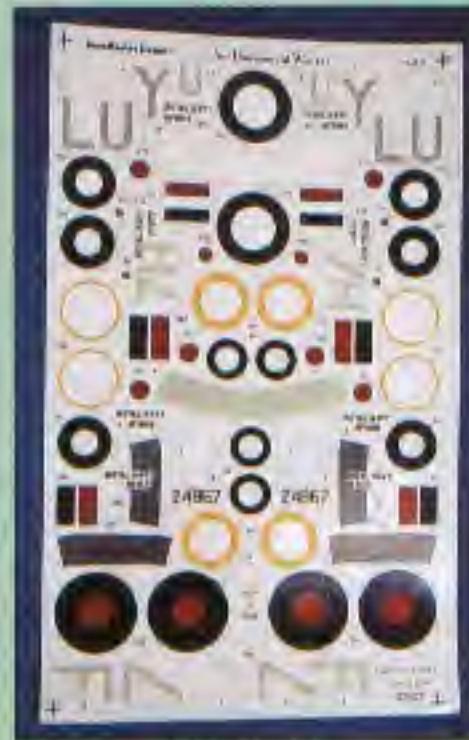
The whole cockpit area was sprayed with Xtracolor Interior Green. The detail on the resin castings is starting to really show now



The film was attached to the rear of the instrument panel using cyano-acrylate (super glue) making sure that the alignment of the instruments with their respective apertures is correct



After the panel was dry brushed with some darkened aluminum, the photograph shows what can be achieved in about fifteen minutes of work!



Again, mandatory when creating a nice quality replica is the use of after market decal sheets. Sheet No. 48-439 'Sea Hurricanes at War Pt. 1'



The resin rudder is dry fitted in place to check the fit. A little scraping of the inner surface of the fin is required to get the part to sit correctly



The pilot's entry hatch is cut out from the starboard fuselage side



To accept the resin replacement, the kit's rudder is carefully scribed down the hinge line and snapped off



When construction got underway, the starting point, as is nearly always the case, is the cockpit area. The Czech Master set provides nice side panel, and there is no need to assemble any of the kit parts



After detail painting was completed, the whole cockpit assembly was given a wash of highly tinted Raw Umber oil paint and then dry brushed with lightened shades of the interior Green



The etched instrument panel was sprayed matt black, slightly lightened to get a better scale finish. The rear of the negative film was painted white to represent the instrument faces



My attention now turned to the main airframe and after the cockpit was hidden away between the fuselage halves, the rear resin section and control surfaces were attached, again using Cyano-Acrylate. A perfect fit in both cases!



The rear lower fuselage section was replaced using MDC's resin part and the join follows a natural panel line. A simple application of Cyano-Acrylate secured the part and then after sanding down the join was nearly invisible

girlfriend's name, Sheila, was applied on the port side of the engine cowling, just below the exhaust stacks. This particular aircraft's markings are available on one of the recent sheets, specifically for the Sea Hurricane, from AeroMaster, (48-439). A round of applause must surely go to AeroMaster for issuing decals for the less well-known types, but at the time that this was written, a 1/48th model of the Sea Hurricane has yet to be issued, therefore a conversion was necessary. So, armed with the razor saw, work began...

Initial Preparation

It was fairly obvious from the start that the donor kit would be Hasegawa's latest 1/48th Hurricane Mk IIc and the conversion parts were sourced from Model Design Constructions (MDC) range. The only other Mk IIc that I can think of is the ageing Airfix kit. References for the Sea Hurricane are fairly sparse. Although MDC do list some references that you could use, most of the reference material that I acquired was from the Internet; the addresses are shown at the end.

In addition to the MDC set, the already well-detailed cockpit was replaced with the cockpit detail set for Mk II Hurricanes (4011) from Czech Master Kits. These sets are absolutely delightful. Apart from the quality of the resin mouldings, they contain an etched set including the basic parts from what is obviously the Eduard Hurricane Mk II set and also a nicely made vacform canopy which was rather essential as I'll explain later. Aires resin set (4035) for the control surfaces and Kendall's resin Hurricane flaps completed the shopping list. It's just as well that a rather well known, North London shop had a sale last December! Having already purchased the Eduard Hurricane Mk II etched detail set (48-232), which now seemed superfluous to requirements and would be a pity to waste, it was back to the PC, onto the Internet again, log onto Hannants website and order another Hurricane!

The appearance of the kit itself was to the usual Hasegawa standards and the MDC set was nicely packaged in a sturdy cardboard box. MDC produce a wide range of accessories and conversions in 1/48th scale and the quality of these sets is also superb.

All kit sprues and resin detail parts were given the standard good wash in warm, soapy water to remove the mould release agents, rinsed and then left to dry for a day. Living, as I do, in a warm climate certainly speeds the

drying process up a little! The assembly process was pretty much as per the kit instruction sheet and started with the cockpit tub.

Construction

The Czech Master resin set includes the cockpit tub, seat, sidewall details and a very nicely detailed control column. An etched instrument panel with negative film backing to represent the instruments was supplied and on the etched sheet, further cockpit details were found:

How many times do I have to say this? The Eduard etched instrument panels, in my view, are really outstanding and I consider them essential in this scale. The film representing the instruments is painted white on the reverse side and the etched panel painted to match the black panel of the full sized version. Rather than use black, it is advisable to scale it down a bit and to achieve a more realistic finish, I use Humbrol grey black. The film is then carefully placed on the reverse of the etched panel making sure the instruments line up with their respective apertures and then glued on using super glue. The instrument faces are then covered with Humbrol Clearfix or a similar clear gloss product, to represent the glass fronts of the instruments; a little dry brushing with silver and it's finished. The photos show what can be achieved with a little practice.

The cockpit area itself and the seat were painted interior grey-green from the Xtracolor range. In recent articles it has come to light that some of the seats in British aircraft were made of a composite material and were a red-brown colour, however I left mine painted in the interior grey-green colour and just painted the seat cushion in a leathery brown. The seat belts and harness details were painted tan. The excellently moulded detail really shows when a good wash of raw umber oil paint was applied being further enhanced by a little dry brushing with lighter shades of grey-green and toned-down silver to represent worn areas.

With regard to dry brushing, the technique has been extensively described and practice does make improvements in the appearance of a model. The only thing that I can add to the encouraging remarks made previously in other articles, is that you should use a little restraint. Use the technique sparingly and build up the effect, make sure that only a very small residue of pigment

remains on the brush and carefully examine the work after each application. OK, I know that we are entering the realms of professional techniques, but even if you make a model for weekend relaxation, these techniques will improve your skills and give greater satisfaction with the finished model. Details in the cockpit area were picked out in various colours and this is really where a little research pays dividends. Once the cockpit tub looked satisfactory, it was placed aside whilst a little surgery was carried out on the Hasegawa kit.

Scalpels, Saws and Scribes at the ready!

The kit itself is quite well detailed and represents pretty good value for money. However, I couldn't stop myself using some of the many aftermarket items available for the Hurricane. The fitting of these does require a little careful work with the razor saw though, and this is where I discovered a rather strange problem...

The lower, rear fuselage was cut out using the replacement MDC arrestor hook housing section as a guide. After cleaning the resin part up, it proved to be an excellent fit. This could not be said of the flaps and a little more work was required on the lower wing panel to get the replacement parts to fit nicely and this is where the 'strange problem' became apparent.

During the scribing of the flap's hinge line, in order to remove them, the mid-centre section of the lower wing broke away. It appears that the plastic used was rather brittle, as no real extra effort was required to scribe and cut the various parts. Later during construction, the whole of the port wing nearly snapped off! But more about that one later.

Further surgery was carried out, cutting the rudder and elevators off to allow the

respectively. The holes for the parts representing the cannon bulges on the upper-wing surfaces were opened and holes drilled in the lower wing section in order to accept the MDC resin catapult spools.

Get the glue out!

In this day of high technology, even the poor Modeller has not been left untouched. The various adhesives available are quite daunting in their number. For large, plastic-to-plastic joints, I use Faller's cement, which is a thin, liquid cement in a container with a needle tube applicator. I've only ever found the stuff in Germany though! For other plastic joints, I use Tenex 7R and for all the other parts, resin, metal etc, it's simple superglue that does the trick! Or rather not-so-simple superglue as these days we have different formulas and viscosities to choose between!

The fuselage sides are cemented together, trapping the completed cockpit tub between the two halves. To accommodate various Hurricane derivatives within the same basic tooling, Hasegawa have separated the engine cowlings to allow the Mk II's Rolls Royce Merlin XX cowling and the shorter Hurricane Mk I cowling to be attached to the same basic fuselage. This is not particularly easy to achieve as a little gentle persuasion resulted in the assembly coming apart a number of times. Also the very thin coating on top of the instrument panel decided to come adrift on one half and, as the part could not be found again, was replaced with thin plasticard. As luck would have it, it looks better now, as the plasticard is much thinner than the original part!

Once the fuselage halves were securely bonded, the resin lower fuselage and arrestor hook housing was super glued in place. As



The resin replacement control surfaces also fitted very well. The contents of the set include the full horizontal stabiliser as well

placement of the resin items. Again, I consider the use of these items fairly compulsory. The Hurricane, as with most aircraft of that era, did not have powered flight controls and therefore when stationary and not locked, the flying surfaces would have let gravity take over. This is especially noticeable with the elevators, which would have been seen hanging down and not level with the horizontal stabiliser. The ailerons would not be seen displaced much as they move in opposite directions. To animate a model a little further, I usually displace the rudder slightly. Finally, the cockpit entrance door and the rear flap of the large under-wing centre air intake were cut out to allow the resin door and Eduard etched replacement parts to fit

long as your initial preparation of the fuselage is spot on, then the placing of MDC's part is an absolute pleasure. Have I already said that this company's resin mouldings are really quite remarkable? Very little filler was needed to fair the lower fuselage in and where it was used was really only where I had been a little over zealous with the sanding stick! The resin arrestor hook, again beautifully represented, was placed in its housing and the sides given the briefest of clean-ups to ensure a smooth transition between plastic and resin.

Assembly continues in the usual manner

The assembly continued in a logical manner with the landing gear well, which is a one-



The wheel well area of kits is sometimes ignored, but not by Hasegawa. There really is no need for any extra detail here.



This is where the trouble began! The starboard rear section of the lower wing panel just snapped clean away. Also visible is the large hole that was left after cutting the flaps away; this was filled using Eduard's etched part.



The Eduard set in action, this now nicely covers the gap left after cutting the flaps away



SNAFU! What went wrong here is beyond me. I'd certainly welcome any comments from the manufacturer or importer.



The large break, right across the port lower wing section, would need major work to get a good finish. What else could I do other than forget about the project for a couple of weeks?



So out came the green stuff. I knew from the start that the join was going to be difficult to hide; the saving grace was that it happened on the lower surfaces.



The project now had less appeal, however I had promised the article to the Euler and so had to carry on. Green Stuff seemed to be everywhere!



The problem with producing kits that are able to cope with all cracks of the aircraft is that major components sometimes are different, resulting in joins that are less than perfect. This is hardly a 'shake the box' kit!



More Green Stuff! I have tried various fillers and have found that the tried and trusted varieties work just as well as more recent products. I tend to stick with Squadron's green filler and Minwax's spray fillers.



After the lower details were filled, the lower surfaces were sprayed Sky using Xtracolor X7. Have you noticed that I forgot to mask the wheel wells off? Oh well, this was just going to have to be one of those models!



The upper surfaces received a couple of coats of Xtracolor X5 Extra Dark Sea Grey. This colour was lightened to represent the faded appearance that the colour would have taken on after weeks at sea.



To be able to model the B, C and D wings, the canopy is moulded as separate inserts for the wing. The fit is not perfect and yet more green stuff would be required.



In preparation for spraying the upper surfaces, the cockpit area was masked off and the resin pilot's hatch latched in place. A final sanding of the filled areas completed the preparation.



There are almost as many ways to mask canopies as there are modellers! My chosen way is to mask flat surfaces with Bare Metal Foil; complex shapes being masked with strips of masking tape and then held in with Maskol.



You do not need hi-tech equipment to get the best from your modelling. A block of plasticine and a few cocktail sticks always come in handy to hold the smaller parts. The propeller is masked and is now sprayed matt black



To get away from all the filling and errors that were slowing creeping in, I decided to leave the main airframe well alone for a while and concentrate on the other parts. Here, the propeller tips are sprayed yellow and then masked off



The finished propeller, which will receive a little weathering in the form of darkened silver paint along the leading edges. Incidentally, perhaps surprisingly, it is always the rear faces that get worn more quickly

piece moulding that sits in the lower wing half and then the wing upper surfaces were glued to the lower wings. I used Eduards etched parts to represent the interior of the upper wing surfaces, which would be exposed when the flaps were lowered, as well as hiding the large holes either side of the fuselage after the wings had been cut. The cannon bulges were placed in their respective locations and the whole assembly presented to the lower fuselage and it was here that disaster struck!

I have already mentioned that the plastic seemed rather brittle, well just as I was positioning the wing surfaces, the port wing snapped right along the lower surface, from the rear of the wheel well to the flaps! For the life of me I cannot establish why this happened. All the interior structures fitted perfectly and no undue stresses were present when the fuselage and wings were joined together. So, how do I fix this one? A good idea in these disastrous cases is to put the model away for a while! The model was placed in its box and left for a week whilst I contemplated starting something else. However, I had already promised this article to the Editor and so after taking a week off to calm down I started work again.

To ensure a really good join where the plastic had snapped, super glue was used in copious quantities and then accelerator was sprayed on ensuring a swift bond. The, now very strong, join was sanded down as well as possible. Unfortunately the join is visible and less than perfect. This proved extremely

frustrating and had I not got so far (and had I not invested in the resin bits and pieces!) this model would certainly have been cast aside by now!

Jack of all trades, master of none

As previously mentioned, the Hurricane kit has been designed to allow various marks to be kitted and it is here that one of the clues is visible. The kit that I actually used was Hasegawa JT152, the Hurricane Mk IIc 'SEAC' (South East Asia Command). One difference between this and its European counterparts was the different carburettor intake filter housing. On the 'SEAC' Mk II the tropical filter was quite often used, however for the Sea Hurricane that I wished to model, this was omitted and the optional part no. B2 was used instead with parts J21 and J22 making up the much smaller carburettor intake, which with the addition of the Eduard etched grill, looks very nice.

The tailplanes were attached and the resin elevators superglued on in a drooped position, for the reasons previously described. This Sea Hurricane was now beginning to take shape and my enthusiasm for it was growing a little, after the initial mishaps!

Load the Airbrush, ready, aim and ...

Once the lower wing attachments were in place, the main air intake details completed and the landing gear leg parts identified, the lower surfaces were masked off and sprayed using Xtracolor's X9 Sky. Yes, I know you have heard it all before, but for the benefit of those that haven't, Xtracolor paints are very good representations of the original RAF and FAA colours and they dry with a gloss finish. The advantage of this is that decals should be applied to a gloss finish to eliminate silverying. The alternative to using Xtracolor paints is to apply gloss varnish over other manufacturer's matt finishes before applying the decals. No problem, it just takes longer!

The lower surfaces of the Sea Hurricane were sprayed X7 Sky, along with anything else I could think of whilst the airbrush was loaded with this colour. The model was left for the paint to dry and cure for a week. The gloss enamels used by Xtracolor should be left for at least three days before handling and after numerous accidents caused by impatience, I prefer to leave them a week.

So in the meantime I started one of Flightpath's 1/32nd super-detailed, resin and etched brass Sidewinder missiles. These things are great if you want to waste a week or two! Actually, here's a tip; to stop you getting impatient with the model that you are doing, risking fingerprints on wet paint etc. Why not start something a little more demanding and time consuming. Flightpath's products certainly come into that category! Anyway, I digress....

The Sky is now dry; next, Extra Dark Sea Grey

After the Sky paint had cured, attention turned to the upper surfaces. The front windshield was separated from the canopy as I intended to use the vacformed, sliding canopy. The reason for this is that the Hasegawa canopy is moulded as a single piece and even if you wanted to show the canopy open, the rear section will not slide

over the rear fuselage unless major surgery was performed, and I preferred to leave the saw and scalpels alone for a while!

After the front section of the windshield had been masked, it was then cemented in place using Micro Scale Krystal Klear, a PVA-based adhesive, and the radio aerial mast was glued in place, only, as befits the progress of this model, to be snapped off later! The sky lower surfaces were now masked off for the application of the Extra Dark Sea Grey (Xtracolor X5).

One look at this colour told me that it would perhaps not truly represent the colour of the Sea Hurricane after it had been subjected to the North Atlantic weather. So I lightened it up quite a bit (in fact it turned out almost like plain old Dark Sea Grey) and then applied it to the upper surfaces. Again, the model was left for a week, so I carried on with the Sidewinder!

Propeller and Spinner

The propeller tips were sprayed yellow and then masked off prior to the whole propeller being sprayed matt black. A note on the decal sheet mentions that the spinner could have been Dark Slate Grey although in the pictures that I have of Sea Hurricanes, the spinners do seem either black or sky. So without any pictorial reference of this particular aircraft, I chose to paint the spinner black.

The application of the camouflage colour

"You are never too old to learn" is a well-used phrase and applies, in this case, to me. Not that 35 is too old, I certainly don't think so anyway, but I have become set in my modelling ways. However, I recently discovered a technique for masking camouflage and achieving a very subtle feathered overspray effect. I would certainly welcome any comments regarding the division between camouflage colours, were they hard lines, or were they softer, sprayed edges? My references show both.

I always used to use card or paper masks that were lifted at the edges. However, if you roll a piece of Blu-Tack on the desk to get a long, sausage shape, this will adhere to the model quite nicely and then just the unpainted side of the division can be masked off with tape. This allows quite complex contours and curves to be followed and gives a very nice edge to the division between the colours. And so with the model covered in tape, newspaper and Blu-Tack the Dark Slate Grey (Xtracolor X25) was sprayed on. The model was left for another week and, yes you guessed it, I put another fin on the Sidewinder!

The Undercarriage now gets a bit of attention

The undercarriage legs and details were sprayed silver, using my preferred range of metallic Testor's Metalizer paints. These come in many colours, some 'buffable' and are really quite authentic in this scale. The inside of the undercarriage doors were also given a quick spray of Aluminium Plate. The detail on the undercarriage is very nice and the legs are realistically thin. How they coped with the deck landings is surely a compliment to the design, or perhaps to the skill of the Navy pilot's ability to 'grease it on'!

The tailwheel was replaced with the more



Another crack! This time the upper cowling joint came adrift and the plastic cracked a little down the starboard side. Suitably re-glued, filled and cleaned up, the section was re-sprayed

accurate white metal Hurricane Mk II tailwheel from Aeroclub's catalogue, part number V146. This is more accurate than the kit part, which I believe represents the Mk I Hurricane tailwheel.

Decals and Varnish

The model was now nearly finished with just the finer airframe details and the decals to be applied. As the decaling process usually requires the model to be extensively handled, I prefer to leave all the little bits, pitot tubes, guns etc, off until the last moment. This did not prevent the radio mast from being snapped. After the previous problems, you can imagine that the air in Dubai was a little blue!

I really cannot add to the extensive praise that some of the after market decal companies have received. The application process, using just a little Micro-Sol to settle the decals around the details, is really quite easy. Just remember to make sure that the decal is applied to a gloss finish. Any doubts, apply a bit of gloss varnish first.

After the decals had fully dried, the model was given a couple of coats of Xtracolor Extra Matt Varnish and left for a couple of days before handling it again.

The final details were now added and I stood back and admired nearly three months of work! OK, I did not stick with this one solidly for three months, but at over 100 hours, the project was one of the most time-consuming that I have undertaken. Despite this, and the problems with the brittle plastic, I am quite proud of the results and a less well-known type sits on the display shelf.

Mark Stanton

References:
British Warplanes of World War II.
ISBN 1-874023-92-1

The Internet:
The FAA Homepage: <http://www.faasig.org>
IPMS (UK) FAASIG: <http://www.ipmsuk-faasig.jc24.net/lightdeck.html>

Correction

As a postscript, I would like to refer to my article on the RAF Sabre featured in November's Scale Aviation Modeller International. I have received a few comments through the Editor regarding the accuracy of the model. Firstly, the panel, which covered the nose gun bay, is depicted as being hinged at the top. This is, in fact, wrong as the panel simply detached. It was my assumption that the panel hinged and the one photograph that I have showed the panel correctly detached. I thought that it had just been taken off! Secondly, the aircraft modelled, XB927 of No. 130 Sqn RAF, may not have worn the Red/Blue squadron flashes. Thanks to those that have taken the trouble to write in and not criticize idly from the armchair!



There are almost as many ways to mask camouflage schemes as there are modellers! I scanned the kit's instruction sheet, then enlarged it by 140% before printing, giving me masks that could be cut out.



Once the masks were in place, they were lifted at the edges by placing a roll of masking tape underneath. This will give a nicely feathered edge to the colour division.



The vac-formed sliding canopy was masked and painted separately. Again, good old cocktail sticks prove indispensable!



With respect to the painting, all that was left to do now was pick out the details. The arrestor hook and tailwheel (an Aeroclub white metal replacement part) are receiving the attention here.



The model was now complete to the point where decalling and final weathering can be started. Raw Umber oil paint was heavily thinned and then run along the panel lines before being wiped away in the direction of the airflow.



Small circles were punched out of a sheet of Bare-Metal Foil with a leather punch and placed over the plastic landing lights. These were then rubbed down over the detail with a cotton bud.



The main undercarriage is certainly a highlight of the kit. It is beautifully represented. Debate continues as to the colour of the legs, was it Sky or just bare metal? After consultation with those 'in the know', I chose the latter.



After the decals had dried and the weathering effects completed, the aerial mast was reconstructed and my favourite material utilised to represent the aerial. I raid my wife's hairbrush and extract a few strands of her auburn locks!



With the pilot's hatch attached in the open position, this little project was complete - and not soon enough!



To achieve the same effect around compound curves, roll a piece of Blu-Tack into a long thin shape and then use that to mask the camouflage. Again a nice feathered edge will result.



The staining behind the guns was represented by spraying Tamiya X-19 Smoke acrylic paint around the leading edges of the wings and back along the surfaces.



The area which broke along the lower wing surface cannot be easily seen now that the model is nearing completion.



Just when everything seemed to be going well, I managed to snap the aerial mast off! This was later put back in place using Cyano-Acrylate and accelerators.



Shells' took some three months to complete. OK, it was on and off, but the total time involved was over 100 hours, of which probably half was spent correcting the kit's problems and my own mistakes!



The look and 'feel' is unmistakably Hurricane but only those knowledgeable few got it right first time - Yes it is a Sea Hurricane and it now sits proudly amongst its, better-known, contemporary fighters. A most gratifying project as it involved using most skills acquired over the years and the final model looks right - well I think so!

The Breguet 14Bs

by Harry Woodman

Before 1914 the French army had decided that the most suitable type of aeroplane to carry out reconnaissance and artillery duties was a pusher; that is, a machine with the engine at the rear of a nacelle which pushed the contraption. The alternative was a machine with the engine in front which pulled it, this was a tractor format. The observer who occupied the front seat in the nacelle of course had a splendid view forward and down and when he was given a gun, he also had a good field of fire until the war in the air changed in mid-1915. When German scouts appeared with a fixed synchronised machine gun or even aggressive two-seaters which unsportingly attacked from the rear and below, the pusher system adopted in the pre-war manoeuvres proved to have a great drawback. The Germans called the miscellaneous collection of French pushers 'lattice tails' and they proved to be vulnerable for the French gunner in his grand circle seat could not defend his machine when the attacker was hammering away at the rear of the stabs. Apart from this disadvantage the positioning of an engine in the rear was not the most satisfactory method of employing the limited power of early aero-engines. This was appreciated before the war and among those who considered that the tractor was superior was Louis Breguet, who also advocated much greater use of metal in airframe construction. Breguet had created and flown several tractor biplanes of distinctive, indeed idiosyncratic design, however, he realised, as did all the other manufacturers, that the only way to survive was to acquire a government contract which meant military aircraft of the type that the French army wanted. His answer was a bulky pusher known as the BU.3 and its successors joined the collection of Farman and Voisin pushers



Close up of radiator grille of a B2; early Breguets had no grill. The vertical louvres could be controlled by the pilot and are seen here in the maximum open position. Note the oversized radiator. Fiat engined Breguets employed an even larger radiator.

that equipped much of Aviation Militaire during the first half of the war.

The Michelin Connection

The brothers Andre and Edouard Michelin,

those of the rubber company and the famous tyre man trade mark, had been interested in the idea of a bomber for some time. In 1912 they had financed a bombing competition which, to the chagrin of the French, was won by an American, one Riley E. Scott.

On the outbreak of war les frères Michelin offered to provide France with 100 bombing aeroplanes; the type selected was Breguet's BU.3 which served as a prototype for the series which followed, all to be built at the Michelin factory at Clermont Ferrand.

In mid-1915 the French War Ministry held a competition for an aircraft capable of carrying a useful bomb load (300 kg) over a distance of 600 km. The winner was Breguet's SN.3, a development of the BU.3. Once again a pusher was selected despite the fact that its performance was inferior to the Paul Schmitt tractor competitor.

It is highly likely that by 1916 the deficiencies of the pusher arrangement were being felt generally, and if so then Louis Breguet was ready. He started design work on a two-seat tractor biplane requiring a powerful engine such as the new 200hp Renault which could be developed to deliver

even greater power. Eventually after an extended development programme the new aeroplane, known as the type 14, was ready and flown by Breguet himself on November 21st 1916. After further development Breguet informed the Section Technique de l'Aeronautique (S.T.Ae) that the type 14 was ready for production. On March 6 1917 a firm production order was received for 150 Breguet 14A2s and further orders followed. Subsequently the 14 was manufactured by several companies including Paul Schmitt, Bellanger, Farman as well as the parent company. The 14A2 was of course a reconnaissance and artillery aeroplane but the bomber variant, the 14B2 was delivered to the S.T.Ae on April 12 1917 for assessment. Production was started and the B2 replaced the collection of Sopwith 1½ Strutters, Breguets and Voisins in bombing units. The Breguet 14 was to have a long life in French and other services in the post-war decade, not only as a military aircraft but used extensively as a small passenger and mail carrying aeroplane. Rugged and adaptable, the Breguet 14 was one of the great classic aeroplanes of WW1.

The Hi-Tech Kit

The purpose of an Aeroplanatomy feature is to assist modellers in areas where they may lack detailed reference material, the object being to describe and illustrate aspects of construction with photographs and drawings. This feature is intended to coincide with the recent issue of a new kit to provide information not always included in the kit. The kit in question here is of course the new Hi-Tech Breguet 14B2.

A few words on reference material would not be out of place for most people wishing to build this kit will not have a great deal of information on the subject, and detailed



Factory shot of Breguet 14B2 reveals the basic aluminium and steel structure (note the simple tubular fin and rudder skeleton). The engine is fitted here and only jury rigging for this seems to have been set up for a photo record.



The forward part of the fuselage shows the 300hp Renault 12Fcx engine and part of the extensive fairing and cowling; note the form of the cowling (see text). One of the two 130 litre gravity fuel tanks can be seen here.

information is required. The kit instructions go so far but without background information, the potential modeller will still be wondering. The references and sources given in the kit are not of much help, two of the references are in specialist publications of some years ago, unless one is a member of these historical groups it is unlikely that this material will be ready at hand. Another reference is a 1962 Harlford book which contains a good drawing by Douglas Carrick, reproduced in 1/72nd scale, but again not readily available. Other references include the 1967 Profile publication (drawing not too good) and a recent book costing over £60 which is hardly likely to be in the average modeller's library, in any case it does not help out in areas needing amplification. The kit states that a drawing by Mick Clark which was published in the Cross and Cockade Journal in 1990 is the best source. Well it is a good clean-cut drawing and is reproduced in 1/48th scale but has no great advantage over Ian Stair's drawing of 1970 (Scale Models) and again in 1986 (Aviation News). The few omissions in that drawing are covered by items in this feature. If the modeller needs to obtain a drawing of the Breguet 14, Stair's original drawing is still available from Nexus, although only in the scales of 1/36th and 1/72nd. Included in this feature are reproductions of some of the detailed drawings prepared and published by the German technical journal Der Motorwagen in its issues of July 30 and August 10 1918. The subject was a captured Breguet 14B2, and this material has formed the basis of almost every drawing of the Breguet 14 done ever since, including those listed above. Apart from the drawings, there was a detailed textual description of the Breguet structure etc. Now some comments on different aspects.

The Wings

These are well modelled and like those in Aeroclub kits and some others, the fabric surface is not represented by great dips between the wing ribs as if someone had attached an air pump to the wing and sucked all the air out. Such banalities still appear, but even on the earliest aircraft



An excellent uncluttered view looking down into the mid-fuselage. The two long trapdoors (aluminium sheet) can be seen at bottom and the heel checks for the observer on the plywood floor needed to steady him whilst bomb sighting. At right are the fittings for the trapdoor controls and the bombs' release gear, and looking forward the axle fairing cut-out can be seen

the fabric was shrunk and treated to become drum tight to maintain the aerofoil section otherwise the aeroplane would never leave the ground. The undersurfaces were usually concave and no ribs should be seen at all. Other than the rib tapes, undersurfaces should be sanded smooth. Modellers should get away from the fallacy that every rib or riblet stands proud in 1/48th scale, in 1/72nd even less so. In the kit the aileron and flap demarcation lines are deep permitting easy cutting away.

The Fuselage

This is well detailed on three sides although the fabric stitching is a trifle over the top but passable. It is necessary to scrape away some of the plastic internally around the window edges otherwise the skin will look several inches thick. A surprising omission is the underside detail which differed between the Breguet 14A2 and B2. The underside of the B2 bomber version had two sets of lengthwise trapdoors (see photos) installed in connection with bomb siting and release of heavier bombs which could

be carried inboard. The floor transparency area on the B2 was more extensive than that of the A2 and a B2 belly drawing is included in this feature, it will be necessary to score out 10 thou plastic card to re-skin the undersurface. The transparent surfaces can either be reproduced with clear material or painted on with gloss very dark blue. Photo-etched parts are provided to simulate the extensive louvring of the fair part of the fuselage. The actual louvres were complex, being split vertically, the front part being convex, the rear concave (see photo.) Hi-Tech have provided an acceptable compromise.

Tail Assembly

There is little to say here, again the surfaces are good without the ridiculous drooping seen on other kits, and the elevators and rudder are easily detached from the stabiliser and fin.

The Undercarriage

In the original this was formidable and the kit provides the main members in white metal. It is a matter of choice whether these are used or the undercarriage modelled from strut stock plastic strip. Details are provided with this feature.

The axle was enclosed in an open topped steel sleeve and was flush with the top of the wooden fairing. In the kit the axle ensemble stands slightly proud but this is of small consequence. In many Breguet 14s a rectangular hole was cut into the axle fairing revealing cross bracing wires. This seems mainly to have been the case with B2s for the cut-out seems to have been to assist sighting. The 14B2 represented by the kit did have this cut-out but it is not present, leaving the modeller to do a fine cutting job or indeed make a new fairing from plastic card.

Struts and Rigging etc.

The interplane, centre-section and undercarriage struts of the Breguet were made from streamlined aluminium tubing so they should not be painted to represent varnished wood. Hi-Tech provide struts in plastic, however this writer would always recommend the substitution of shaped



Detail of the interior of the crew area is revealed showing the aluminium tubes which formed the main structure (some steel sections were used in the fore part for strength). The Ceflon side windows were framed in aluminium but the Triplex windscreens is not fitted. The TO.10a gun ring is elevated and the folding aluminium observer's seat is in the position when he was using the bomb sight and manipulating the bomb release system on his right side



A photo set up for instructional purposes shows the crew positions with all of the interior equipment. Note the Michelin bomb sight on the port side just behind the pilot's seat. The observer is in the position he would occupy if he had to take control of the aircraft should the pilot be injured or killed. He had some basic control which would enable him to keep the Breguet in its protective formation or even negotiate a rough landing. His view was limited through the gap between the gun ring and cockpit coaming (that is why it was never covered) and the side windows. Note the fully opened lower trapdoors

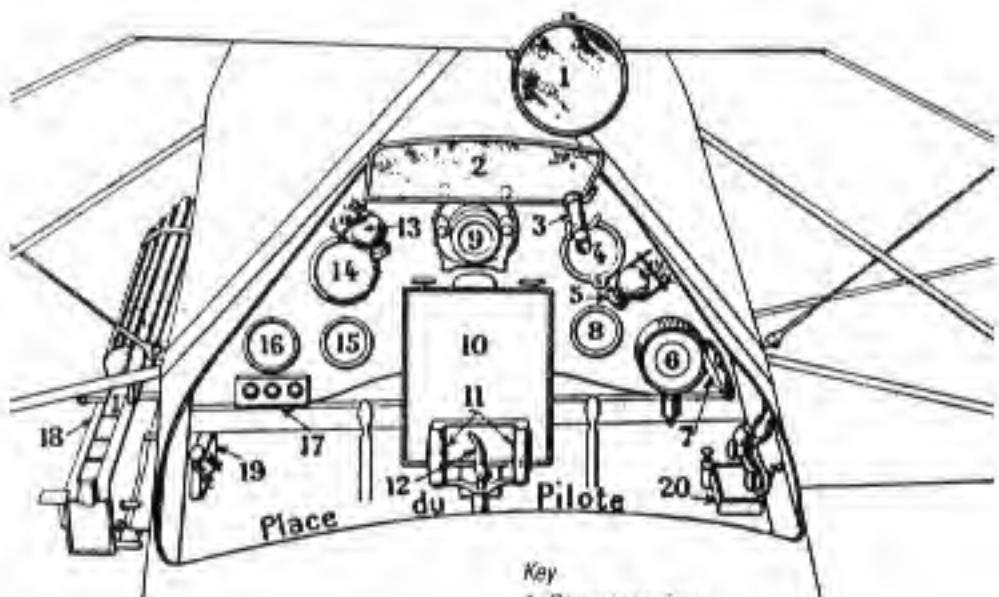
stock (plastic or metal) easily available to replace the lumpy kit items.

Differing types and gauges of wiring were employed in the Breguet 14, in fact four types: (1) internal structural wires supporting the airframe, (2) external structural wires from fuselage/undercarriage to wings known as drag or drift wires and undercarriage bracing cross wires, (3) flying wires supporting the structure in the air and landing wires supporting it when landing and finally (4) control cables for ailerons, elevators and rudder. Modellers have their own ideas about representing all this wiring but it should be remembered that the wiring varied in thickness and shape. Included with this feature is a rigging diagram which indicates the three main thicknesses of external wiring. In 1/72nd scale this may not matter too much but in larger scales there is a considerable difference. This writer has mainly used stretched sprue for 30 years, it takes time and patience but it works. The sprue can be shaped to represent streamlined wire (like Farnborough's 'rafwire' really a shaped steel rod rather than a wire) and there are means of tightening it when applied. The many turnbuckles can be suggested quite well with very carefully applied dabs of enamel. A dark sprue should be selected for this purpose and indeed, in the case of the Breguet some of the shaped strut material available is thin enough for the most substantial wiring. The heavier wiring on the Breguet

consisted of two strands spaced by a thin plywood lathe and then bound with fabric, the main idea being that if one wire failed or was damaged, the other would remain to support.

Armament

The standard armament for the A2 and B2 was the same, a fixed synchronised Vickers on the port side of the fuselage and twin Lewis guns on a ring mount for defence. The Lewis guns were French-built Darnes (on later American Breguets some Savage-built 1918 pattern Lewis guns were fitted) and the gun ring was initially the TO.1bis (often incorrectly identified as the TO.4) and later the TO.3 which was virtually a

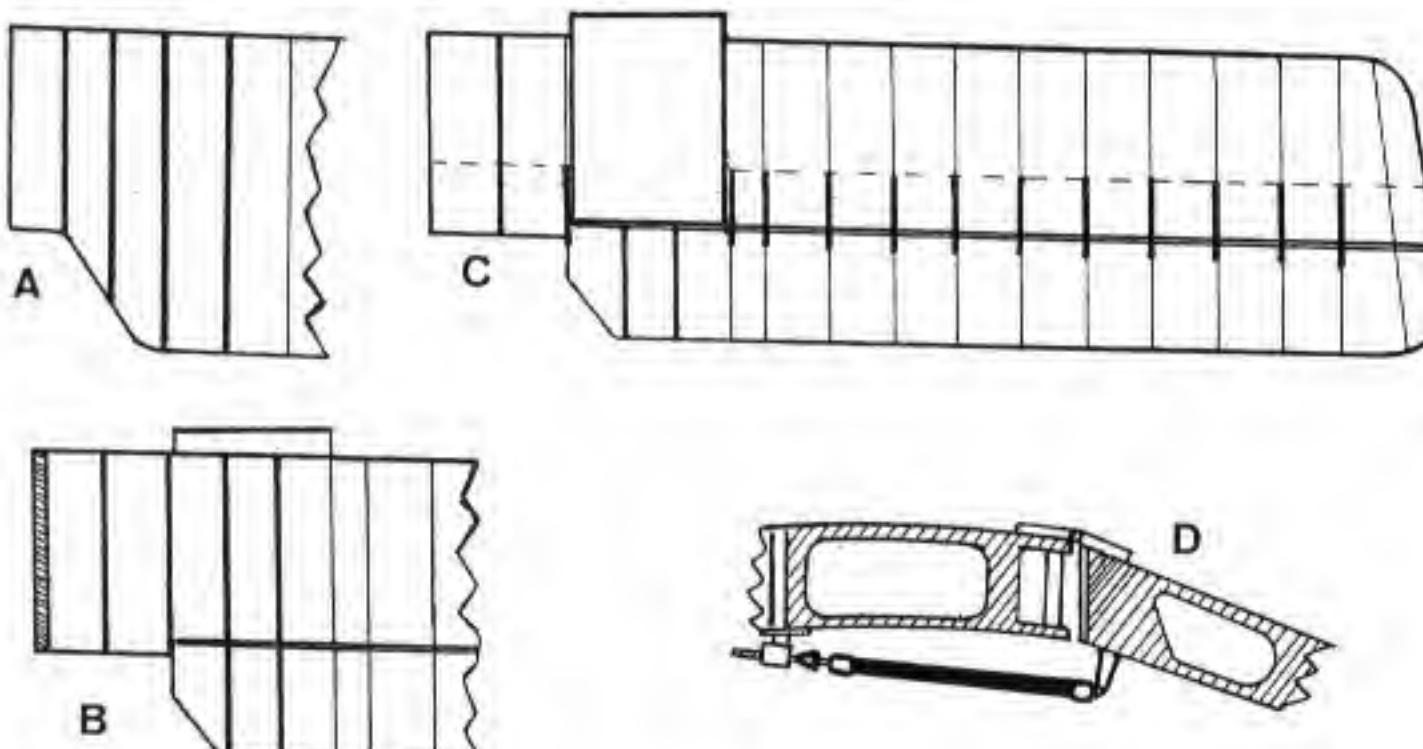


- Key**
1. Rear-view mirror
 2. Triplex windscreens
 3. Calimeter gun
 4. Airspeed indicator
 5. Electric lamp
 6. Tachometer (RPM counter)
 7. Watch
 8. Water thermometer (RH group)
 9. Compass
 10. Map on map carrier
 11. Control column grip
 12. Firing lever for Vickers
 13. Electric lamp
 14. Altimeter
 15. Water thermometer (LH group)
 16. Electric fuel gauge
 17. Control buttons for gauge
 18. Vickers machine gun
 19. Ignition switch
 20. Electrical system disconnector

Not listed but shown immediately above 20 is the pilot's control for the radiator shutters. Also not seen in the photo are the starting magneto at low right, two fuel stop cocks and the throttle at low left

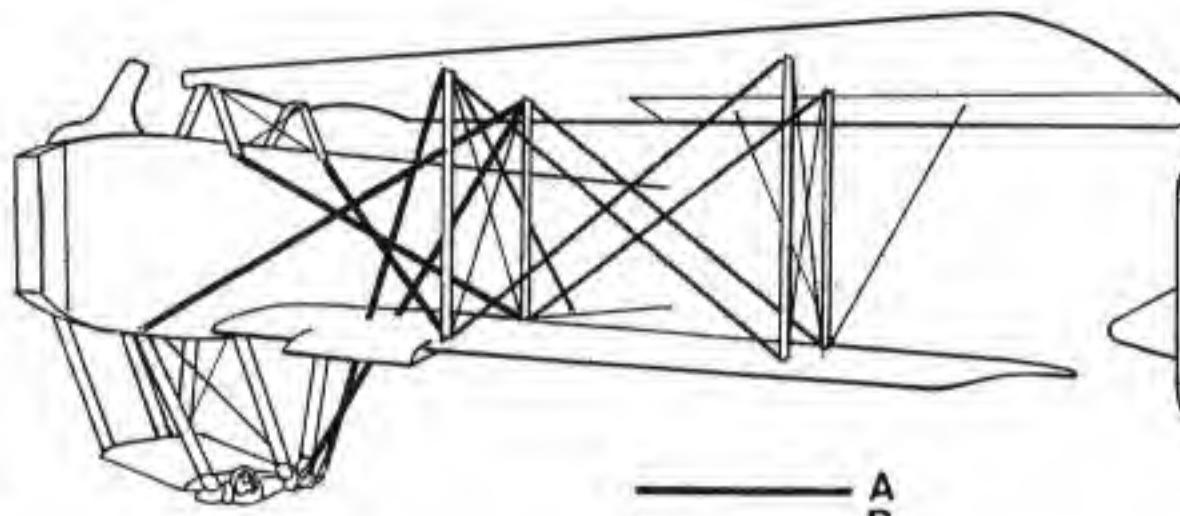


A rather fuzzy picture, copied from a manual but very revealing, showing the dash of a Breguet 14B2 night bomber. The various instruments are listed in the key

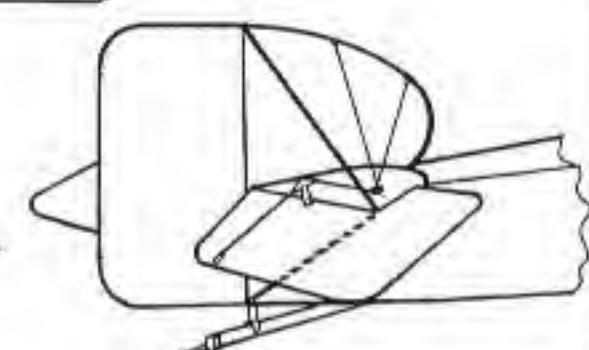


Two details concerning the wings: the central areas of upper and lower surfaces in the propeller slipstream were strengthened by thin wooden strips over the top surface and tacked to the ribs. These are depicted here by thicker lines on A (upper surface starboard side, port and undersurface the same), B (lower wing upper surface starboard side; the narrow shaded strip inboard was either of thin metal or plywood). Drawing C depicts the entire port wing underside and shows the location of the short lengths of rubber cord which caused the rear wing section to resume its characteristic angle when on the ground. D is merely a scrap sketch to show the structure of the twelve rubber cords on each wing

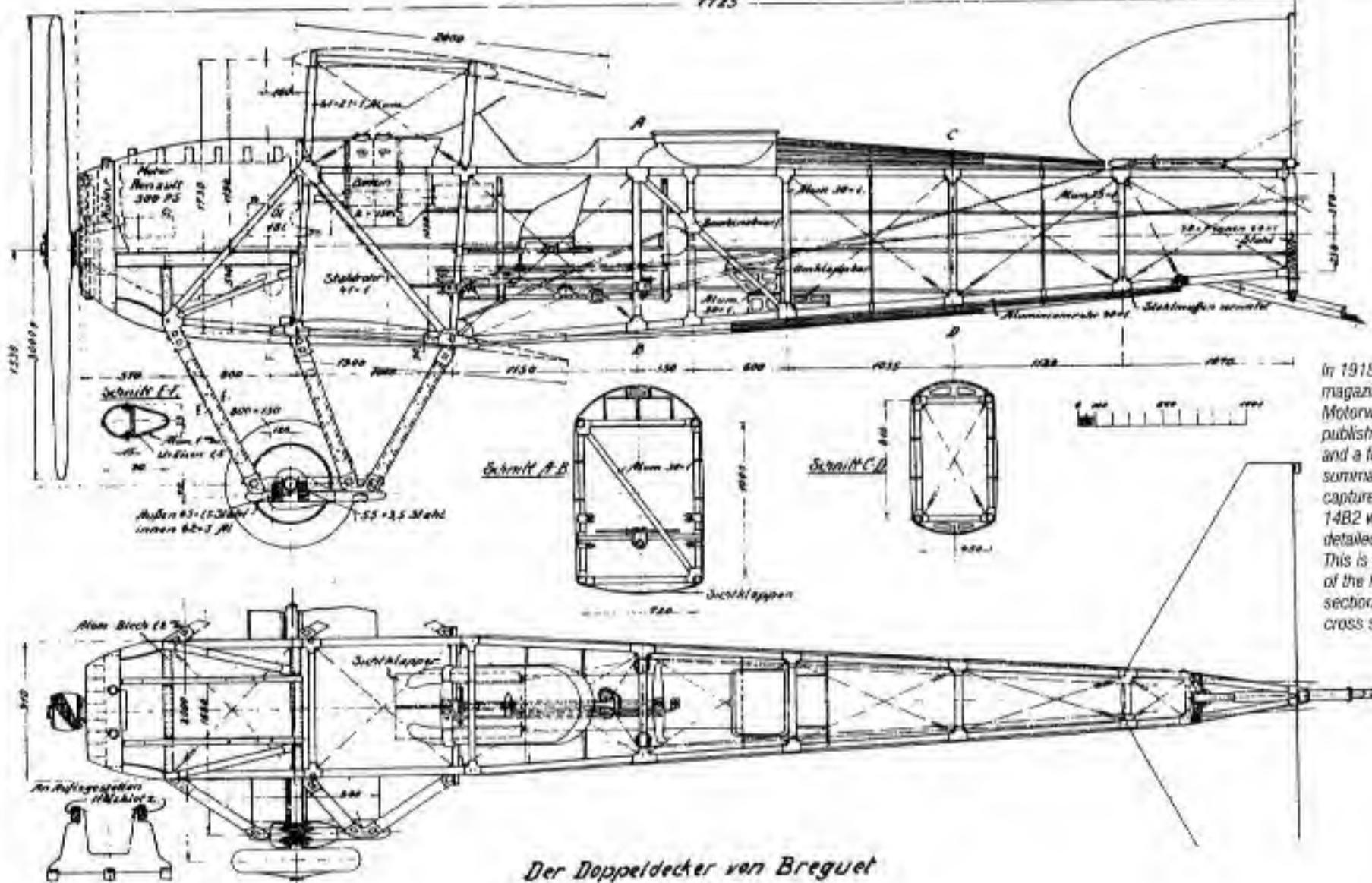
General rigging diagram showing the varying gauges of wire (see text). A indicates the thicker double wire drag/drift wires, they also supported the lower wing when bombs were carried. B indicates the anti-drift wiring and the flying and landing wires. The finest wires were those between the strut pairs (stagger or incidence wires). The tail support wires and elevator control cables are shown here.



A
B
C



C Harry Woodman

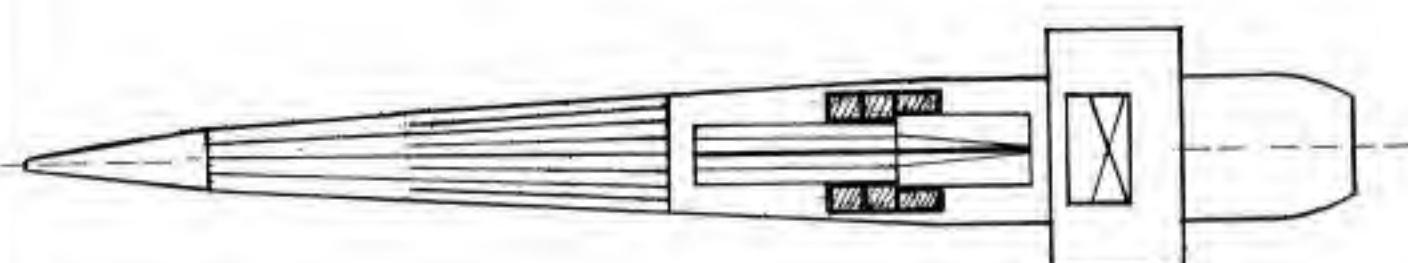
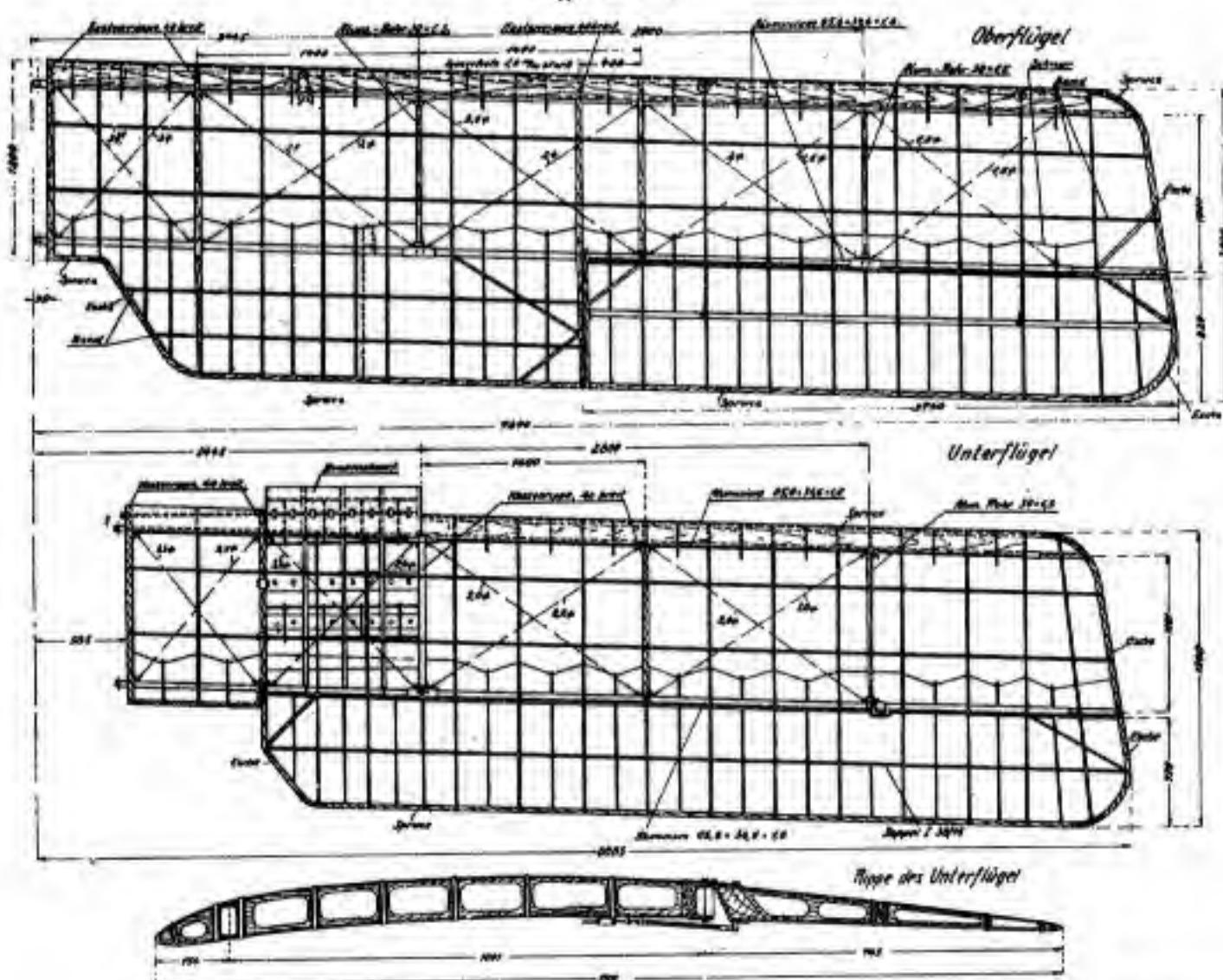


In 1918 the German magazine *Der Motorwagen* published an analysis and a full technical summary of a captured Breguet 14B2 which included detailed drawings. This is a reproduction of the fuselage section, note the cross sections

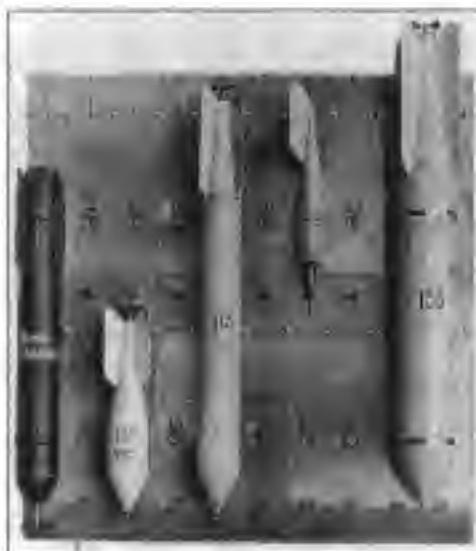
Der Doppeldecker von Breguet Typ. 14 B.2.

Der Doppeldecker von Breguet Typ. 14 B.2.

The detailed wing drawings show all main and auxiliary ribs and internal bracing. The earlier B2s had straight spruce trailing edges, some later models had a wire edge which became 'scalloped' when the fabric was shrunk



The underside of the B2 and A2 were different. The bomber B2 needed the lengthwise trapdoors (see photos) to enable the observer to use the Michelin sight. The front pair also permitted some heavier bombs to be carried internally. This drawing in 1/48th scale is a template to help modellers to add this detail if they wish by scoring plastic card and cutting it slightly oversized (to permit final trimming) to fit over the underside of the kit fuselage. Note shape from photos and position of transparencies. The hole cut into the undercarriage fairing is also shown here, as are the cross bracing wires.



Part of an instructional set of photos taken for the USAS. A full frontal of the underside of the Michelin carrier shows the main types of Michelin missiles carried. From the left they are a Michelin parachute flare (painted dark green) which was so efficient it was used by the RFC/RAF for many years afterwards. The 115mm short Michelin weighed 8kg (17.6lb) the long 115mm weighed about 16kg (40lb approx.) the small 75mm weighed only 5kg (11lb) and the rarely seen 155mm must have weighed 40+kg (80+lb approx.) All the bombs were created for the Breguet and officially known as Michelin bombs (obus Michelin) and were painted pale grey. The windmill fuses were all in the tail and held by a wire loop except for the flare which had a nose fuse. Note the sequence numbers at the bomb hook apertures and the nose retainers. The small 75mm is a fragmentation missile, the extended nose rod causing it to explode above ground, and it was an anti-personnel weapon.

Scarf No.2 ring with perforated quadrants (see illustration). The B21 was fitted with the Michelin bomb carrying gear which accommodated a number of small bombs (the heaviest was usually only 18Kg) however, provision was made, as revealed by the captured B2, for some heavier missiles to be carried internally and dropped through the front trap door. Such bombs were probably of the Le Pecq type (Anilite) which were suspended by the nose. The Michelin carriers held Michelin bombs and the system is illustrated by photographs in this feature. The colour of these bombs was pale grey and they could be dropped individually or in salvo via a special mechanism operated by the

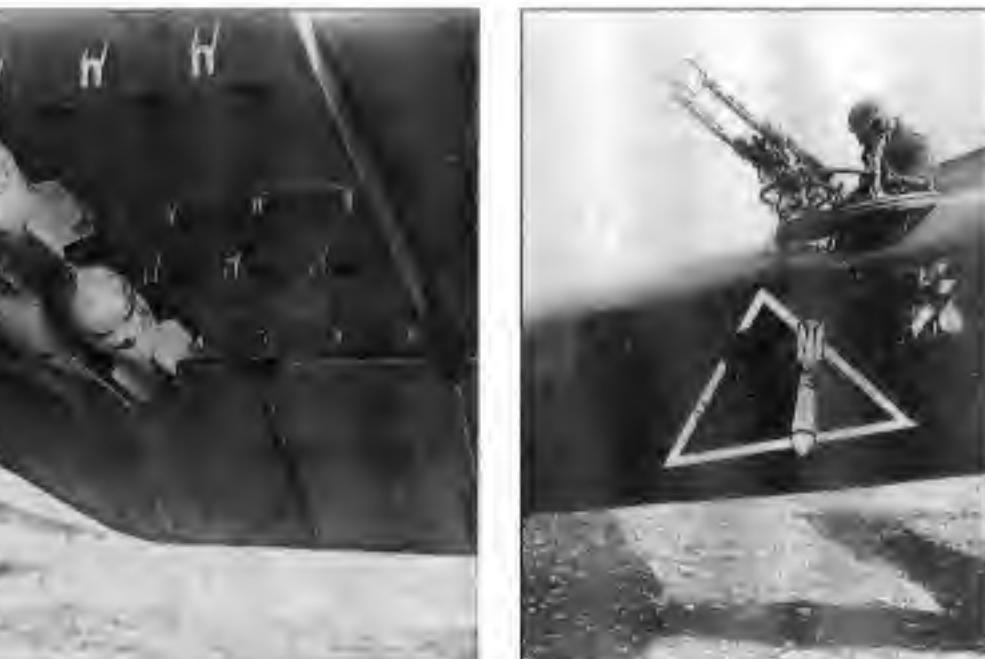


Four short 115mm and two long 115mm Michelin bombs attached to the Michelin carrier under the port wing of a B2. The French originally used converted artillery shells fitted with tin tails as bombs and the classification was by calibre instead of weight, a system carried on until late in the war. Most of the Michelin bombs were lightweight, on later 14B2, and successor Breguet 16, fittings were installed to carry heavy cameras and heavier bombs. Note the thin wooden strips tacked to the inner ribs (see text)

observer/gunner. He also operated the special Michelin bomb sight installed on a swinging arm internally, requiring that the bomb aimer had a good forward angled view hence the trap door system (see illustration). Hi-Tech provide smart bomb-carrying surfaces but no bombs, which are fiddly in small scale. These would have been appreciated as bomb stays and retainers projected from the various holes in the plate.

Colour Scheme

The kit includes full instructions in this area for the aircraft featured. The Breguet appeared at a time when French colour schemes were undergoing a change. By early 1917 a common finish was an overall buff shade, sometimes even richer so that it has been called 'egg yolk' colour. This reflected the type of finish applied to the fabric which involved among other ingredients a fatty varnish. Metal panels were painted in a buff shade to match the fabric colour and this is a common scheme seen on many other types of the



The rear cockpit of a Breguet 14B2 of the 96th Aero Squadron of the USAS in 1918. The two guns are Dame-built Lewis in the jettison arrangement (see text and drawing). The gun ring is the later TO.3, a Scarff copy



A small number of Breguet 14s were acquired from France by the Whites during the Russian civil war. Four of them were captured by the Reds who patched up two, one A2 and one B2 seen here; they were used on the Southern Front. This fine side view shows why kit ailerons should always be cut away and reset and also the correct angle of droop of the rear section of the lower wing when the B2 was at rest on the ground. The fuselages behind are LVG C.5s acquired via dubious means

period. The irregular patch camouflage became common by late 1917 through to the end of the war, with many variations of pattern although basic guide patterns

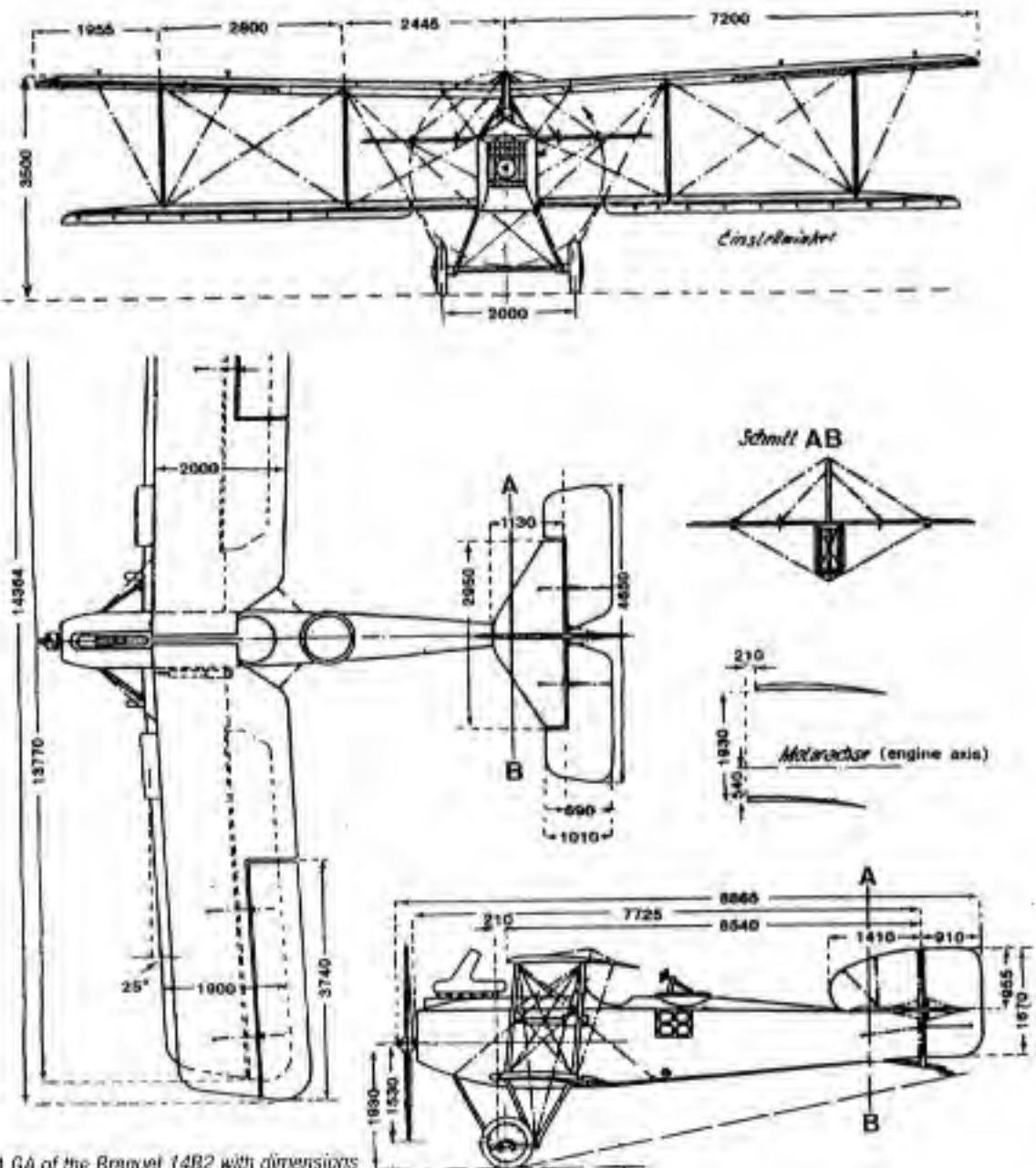
were laid down. The one detailed in the kit is one version, others were a mirror image of this.

There are two final points to note regarding French finishes. In order to protect the fabric from the effects of ultra-violet rays, in 1916 they started to employ aluminium powder in finishes. This was famously used on many Nieuports. However, the use of aluminium powder was not abandoned when the camouflage schemes became standardised, a certain amount of the powder being added to the various coloured dopes, which had the effect of permitting the original colour to be retained but produced a deadening effect on the finish. The modeller can add a touch of silver to the paints to produce this same effect (experiment first). The other point is that whilst the description of black for parts of the scheme was correct, in models, especially those in the smaller scale, such extremes as black and white should never be used. The black should be represented by either a very dark grey or a very dark reddish-grey, with the touch of silver it will not stand out from the rest of the scheme. The undersurfaces were as stated in the kit a pale greyish blue or, if you wish a bluish grey.

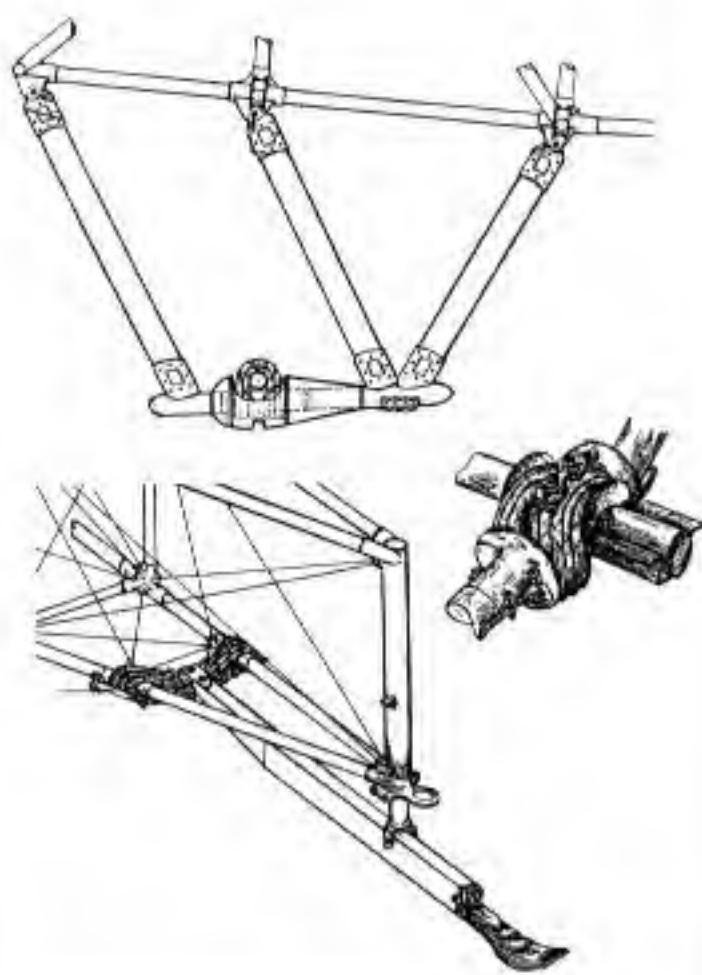


An early production A2 which shows the position of the fixed Vickers and the TO.1bis gun ring fitted generally to the earlier Breguet 14s. Note the Vickers inboard muzzle deflector to protect the nearby fabric and doped cowling from hot debris and gases when the gun was fired. The thin wooden strips tacked to the ribs in the inner wing area (see text and drawings) and the inboard metal/wooden strip at lower wing junction should be noted

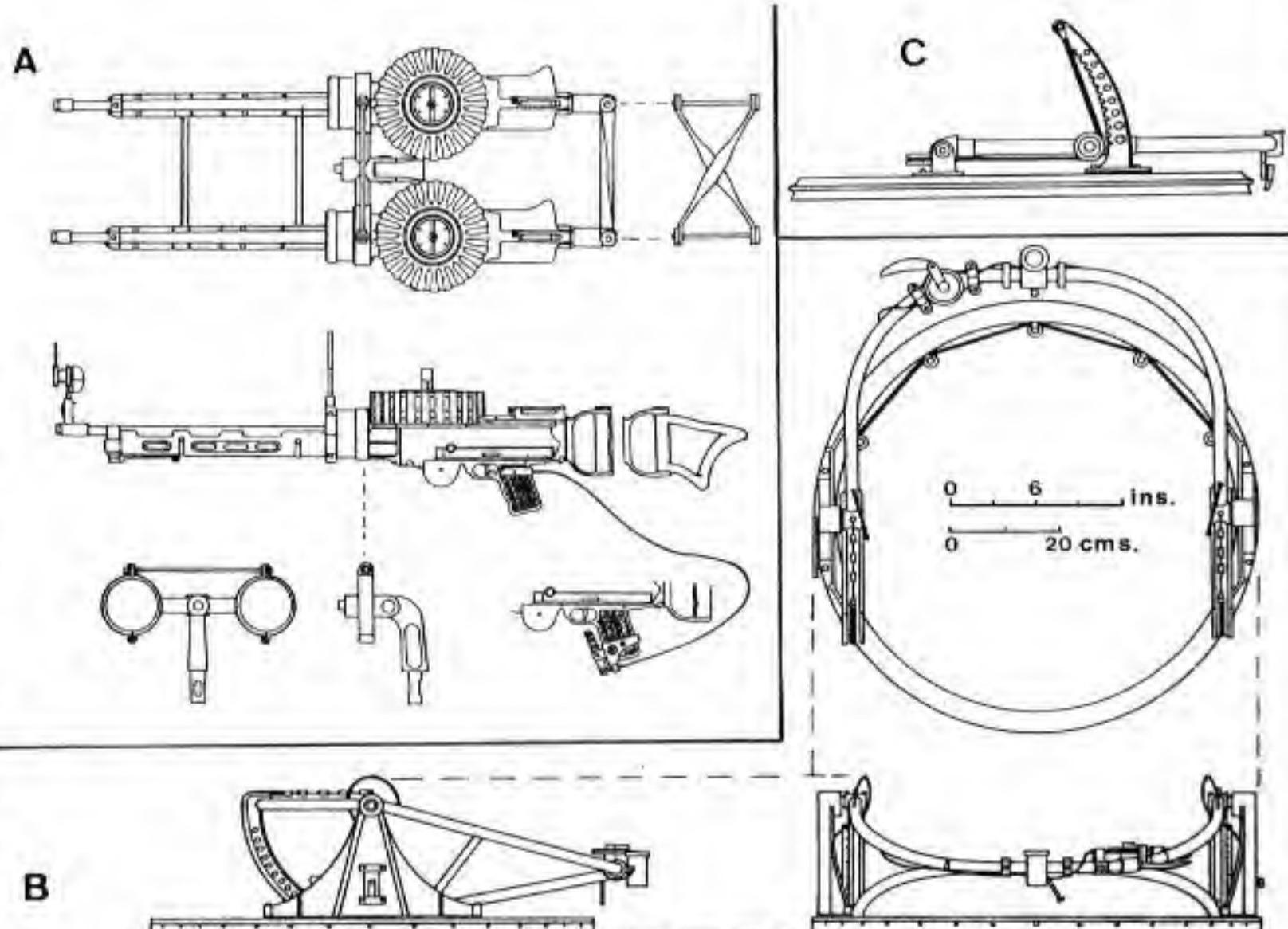
Harry Woodman



A GA of the Breguet 14B2 with dimensions in the usual German form of millimetres. Note that the undercarriage bracing wires at top do not meet the strut/fuselage junction but enter the bottom of the fuselage inboard of the struts.



Extracted from the Breguet manual are these drawings of the undercarriage and tail skid. Bungee cord (known in those days by the trade name 'Sandow cord') was used extensively in aircraft construction for shock absorbing. In many cases the last under panel where the skid was located was left uncovered.



D.7. The defensive armament of the Breguet 14A2 and B2 was the same. Drawing A shows the twin Lewis gun arrangement, the guns being French (Dame built) with wooden protection sleeves over the gas chamber under the barrel. The shoulder stock was not always fitted nor was the system by which one hand could fire both guns simultaneously. 97 round magazines are fitted. Late American two-seaters occasionally had the American Savage-built 1918 pattern Lewis fitted. Drawing B is a three view of the TD.1bis gun ring which replaced the old Scarff gun ring in 1917. This type was fitted to many Breguets but was eventually replaced by the simpler TD.3 (drawing C) which was no more than a version of the Scarff No.2 ring with the quadrants perforated.

L'Armement défensif, Breguet 14 A2/B2

C Harry Woodman

Photo Album: Breguet 14A2



- 1. Tail of the 14A2. Note the profile of the flight wires and control horn
- 2. Top-down view of the rear gunner's station, showing the Scarff ring and machine guns
- 3. Viewed from here you can see the high stance of that gun ring, as well as the generator mounted on the fuselage side
- 4. The massive control surfaces on the wing are amply demonstrated here. Note the twin control horns
- 5. Another look down into the rear gunner's position
- 6. Port side view of the gun ring and cockpit area. Note the gun sight on the starboard side of the cockpit
- 7. Overall view of the starboard side of the fuselage clearly showing the location of the generator
- 8. Nice overall view of the Port side. Note the prominence of the louvres in the front cowling and the machine gun forward of the cockpit
- 9. Close up of the machine guns in the fully elevated position

- 10. Front view showing the louvres and the deep-set exhaust stack
- 11. The undercarriage unit. Note the very heavy gauge of the wires supporting it
- 12. The one thing about a Breguet 14 I always loved was that exhaust stack, shown here to good advantage
- 13. A look down the wing, showing the mass of flight wires and their connections to the struts

Note:

These photos show a Breguet 14A2 (not B2, as depicted in the Hi-Tech kit) and should therefore be used as illustrations only when used in conjunction with the Aeroplanatomy feature elsewhere.

Thanks:

My thanks to Philippe Jourdan for the supply of these photographs.



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SO.6025.01 'Espadon'

by Jacques Niot

History

Soon after the end of World War II, the state of the French Air Force prompted the High Command to set about an ambitious programme aimed at fulfilling the needs of the Air Force for the future. With this in mind they defined four specifications corresponding to the following classes of aircraft: Interceptor, Medium Bomber, Tactical Support and Transport aircraft. From the beginning the interceptor project was allocated to SNCASO, because they already had experience with such machines, having been responsible for the first French jet aircraft which was secretly developed during the war by the famous engineer Lucien Servanty, the SO.6000 'Triton'.

The specification, allocated the designation SO.6020 and called 'Espadon' (Swordfish), called for an aerodynamic shape with heavy armament and good day & night interception capability. Unfortunately, like so many prototypes of this era, no sufficiently powerful turbojet was available and the Rolls Royce Nene with a thrust of just 4972lb (2260kg) was to prove inadequate to equip this enormous 15m long aircraft.

The aircraft was originally designed as a two-seater, and was equipped with up to six 20mm cannon in the nose. Due to the thin profile of the wing, the main undercarriage's retraction required a novel system whereby each wheel swivelled laterally to lay upright in the wheel well. The air intake, initially designed as a belly scoop, was experimentally modified throughout the



whole life of the aircraft. This resulted in the second prototype having the intakes on either side of the fuselage, and fitted with various boundary layer traps.

On November 12 1948, the first prototype of the SO.6020 (No.01) flew with Daniel Rastel at the controls. This flight took place from Orleans-Brizy airfield. The following year, the prototype was displayed in the static line-up at the Orly air show, beside the Triton, NC 1071 and the four-engine 'heavies': Cormoran, Breguet Deux-Ponts and Armagnac. On May 14th 1949 the first prototype was publicly flown for the first time by test pilot Jacques Guignard. During the year the second prototype SO.6020 was

fitted with its six cannon and was rolled out to make its maiden flight in September. This flight was undertaken by both J. Guignard and D. Rastel. Later this airframe was fitted with a SEPR rocket of 3300 lb (1500kg) thrust and was redesignated the SO.6025.

The third prototype (No.03) first flew on the 28th December 1949, but it differed greatly from its predecessors. As a result it was redesignated the SO.6025-01 immediately after roll-out from the factory. This machine was now a single-seat photoreconnaissance aircraft, equipped with four cameras taking the place of two cannon. These cameras were installed behind small square portholes either side, and under, the nose and the fuselage front section was flattened as a result, similar to that of the RF-84F Thunderflash. The four cannon troughs, which incidentally were never installed in this machine, were covered with plates. Compared to its predecessors, the SO.6025's wing area was increased by 2 square metres (from 25.2 to 27.2 sq. m). The air intake was again in the ventral position but it was complemented by a rear fairing for a SEPR 251 rocket. In 1953 it reached Mach 1 in level flight at 13000m (42000 ft), thus becoming the first European jet fighter to reach the sound barrier. The type was last flown for the public at the 211th Paris Air Show during 1955, skimming the ground in



The contents. Look at those magnificent (and very useful) photos on the assembly sheet



A spacer is useful aft of the cockpit (hatched part) to prevent any sagging of the fuselage halves



All parts have been re-scribed and are ready for assembling. Note the work carried out on dorsal fairing, as mentioned in the text.

very impressive passes with the rocket at full blast. This sub-type is therefore the subject of this feature. The final fourth prototype flew for the first time in September 1950 and it reverted to the overall layout of the previous SO.6020s but was a single-seater and had a chopped fin/rudder tip.

In 1956, it became obvious that the whole program was going nowhere, mainly due to the lack of adequately powerful engines. The 'Espadon' did however play a major part in French aviation history and paved the way for designs such as the 'Trident'.

The Kit

The last Paris Model Show, noteworthy for its total lack of 'interest', did give me the opportunity to go shopping and as a result I came across the Modéair vac-formed kit of the SO.6025. This kit initially appeared about 20 years ago but quickly vanished from the shelves. I had given up all hope of ever finding the kit again, but fate was to decree otherwise! The Le Bourget Musée de l'Air had a shop offering a few old kits, and it was here that I found my Espadon.

On opening the box (the lid of which is adorned with a beautiful photograph of the real machine), one gets a shock as the contents consist of just two vac-formed sheets of very thick and stout white plastic (nearly 2mm thick on the less prominent areas). This thickness, quite unusual for most vac-formed models, will prove very useful during the sanding process. Conversely, panel lines and surface details are very crudely scored, hence the need for a good thickness of plastic! One, and only one, acetate canopy is supplied (at that time, manufacturers didn't care how useful a 2nd canopy was!) and due to its rather 'frosty' surface is best replaced by those modellers with a penchant for thermo-forming techniques, although I do not include myself in that group. The kit is completed with a small decal sheet offering French roundels and code letters.

This said, all shapes and dimensions appear to be very close to the real thing and an extra large sheet of scale drawings (72 x 60 cm) in 1/48th scale, printed on high grade gloss paper and supplemented by some magnificent photographs of the real aircraft, including cockpit innards, just confirm the overall accuracy of the model.

Of course, all the main components to make the model are included on the



With the canopy in the open position, the slightly grainy appearance of the acetate is not too visible. Note the glue troughs cut out of adhesive foil.



Underneath of the model. Note the panel aft of the rocket motor exhaust and its 'heated' effect achieved with Tamiya Clear Blue & Orange

vac-formed sheets (about 50 pieces), but there are no resin or white metal pieces, or even a photo-etched fret. But who cares?

Construction

As for all vac-formed models, the two preliminary operations are the cutting out of the parts and the sanding of the surface detail. Concerning the latter, I only know of one manufacturer whose models can dispense with it due to the excellence of the moulding: Dynavector. On the Espadon, when I say 'sanding', I really mean it! All panel lines and rivet detail must be completely eradicated, along with a drastic thinning down of all trailing edges. There is no risk of going through the plastic though, as it is very thick and tough. There was one exception though and this was the long

fairing extending off of the canopy. This is depicted in the kit as a curved line, when it should be a straight line from the rearmost canopy framing member down to the fuselage decking. As a result of my over-vigorous sanding to get this contour right, I did go through the plastic and as a result had to stuff the part with filler and sand it all over again.

Fuselage

Once both fuselage halves' details have been perfectly smoothed out and all tiny scratches polished up (don't forget the model will be silver overall), all the panel lines are re-scribed, particularly the oddly shaped engine access hatches, immediately aft of the wing trailing edges. Then progressively all the wheel wells and camera

apertures were opened up. Note that the latter operation can be dispensed with as these windows were often covered over by metal plates, either all or some of the time.

New main wheel wells, deeper than those supplied in the kit, are built up using plastic card. Pictures of the real aircraft reveal that, unlike modern jets, these wells were remarkably devoid of details such as pipework, ribs or wiring. But this is so much the better for the modeller! The nosewheel well and the rear bulkhead receiving the exhaust pipe (supplied in two halves but best replaced by a length of aluminium tubing of 12mm dia) are now glued in place, as are the camera ports. Here, small squares of thick acetate were glued with cyano applied sparingly with the tip of a toothpick. Clear styrene cemented with liquid cement would do just as well though. Don't forget to paint the interior of the nose Matt Black, including the ballast which has been previously installed. Now, both fuselage halves can be cemented together.

Cockpit

The next step was to cut out the cockpit aperture. This is no easy task as no engraved lines are given to help you and the only way to approach the task is to carefully measure the base of the clear canopy and transfer its contour onto the fuselage. The cut-out is then achieved by opening the fuselage aperture 1mm inside the drawn line.

Modelair did supply the main parts needed to furnish the cockpit, namely a floor, side consoles, instrument panel, rear partition and seat (six parts). They also included a perforated plate, but the use of this item was not made clear in the



Look at that intricate nosewheel yoke, which you have to scratchbuild!



The completed model

instructions. All of these vac-formed parts are very basic and are best replaced by scratchbuilt items, particularly the seat which doesn't seem to correspond to the SNCASO type fitted to the Espadon. This seat featured lateral rounded plates either side of the seat pan which were aimed at protecting the pilot's legs during ejection. With the dorsal fairing, besides the correction of its upper contour already mentioned, I feared that there would also be problems with the rear elements of the clear panels and therefore decided to replace them with a rectangular piece of acetate conveniently bent to shape. The curved shape of these rear windows would be obtained at the painting stage by sticking a piece of masking tape of the appropriate shape along the edge. All this was made easy by the fact that I wanted to display my model with the canopy in the open position. The windshield was glued to the fuselage and the join line touched up with a dab of filler.

Fin

The fin, with its long dorsal extension (not fitted for the first test flights of the 6025) was cemented after vigorous thinning of the trailing edges, and the rudder was cut out allowing for easier painting of the tricolour markings at a later stage. These also gave 'life' to the model when they are cemented back in an off-set position.

Intake

We now turn our attention to the ventral air intake and rocket fairing which is supplied in two halves by Modelair. Once glued together, the lower profile of the part seems a little flat, but was improved by a lot of pushing with both thumbs from the interior before the glue sets. A few dabs of cyano applied along the inner join line will help the unit keep its shape. Fitting this fairing to the fuselage was no easy task and called for a lot of filler or the addition of a thin strip of plastic (Evergreen strip W-3) all along the join line. Don't forget the small vertical partition in the front. The exploded-view diagrams in the instructions shows a long rectangular piece under the rear fuselage and this was most probably aimed at protecting this area from the hot exhaust gases of the rocket engine. This item, which is often not apparent in period photographs, is not supplied in the kit and should be made from plasticard. The rear bumper should also be fabricated in this manner.

Wings and Tailplane

Here again sanding, polishing and re-

scribing are mandatory. Modelair supplies the parts for the undercarriage bays but they are best discarded. It is not only easier to box in the openings of the wing undersurface, but as a result you will gain some much needed depth in this area.

There is nothing really to note about the tailplane except the fact that, as with the wings, nothing is provided for their attachment to the fuselage. Provision for some tabs or locating pins needs to be added since the fit to fuselage is poor and will need a lot of filler. Ensure that the important dihedral characteristic of the period (10°) is reproduced on the model.

Undercarriage

This is the only major shortcoming of the kit. The wheels are supplied in two halves and are really bad because the detail of the rims with their two concentric rings of holes simply did not stand the vac-forming process. The nose wheel, although simpler, is not any better. On my model the spares box supplied the nose wheel, but not the main wheels. I tried to improve them by adding a thin perforated disc and an outer ring emphasising the tyre limit more crisply, but I'm not quite happy with the result.

The worst was yet to come though as the undercarriage legs have been completely omitted by the manufacturer! You do get some sketches so that you can scratchbuild them. This is fairly easy for the main legs, but a real chore for the nosewheel yoke with its multiple swivelling points and complicated mudguard etc.

All undercarriage doors are supplied, but are best replaced with scratchbuilt plasticard units.

Miscellaneous

The swinging section of the canopy received

two tiny hinges on its right edge and two locks on the left. It is best cemented in place after painting the model. The framing should be painted black on the inside and aluminium on the outside.

A very small air scoop is added on top of the dorsal fairing (carved from a tiny block of plastic) as well as two aerials from 0.2mm wire either side of the scoop, forming a 'V'.

Painting

As most published period photos are side views, there is little information regarding the general aspect of the wings, but the fuselage shows numerous lighter aluminium shades corresponding to the ribs and one can therefore assume that this is the case with the entire airframe.

The trick is to duplicate the effect, the end result being a much more 'dynamic' model than if painted plain aluminium. Many products are at the modeller's disposal, either from the automotive range or specifically designed for them; car repair spray paint, metalizing paints or powders (Humbrol, Metalcote, Suj, ModelMaster Metalizers) and so on.

All are good products provided that their use is well mastered, but all have in common two embarrassing characteristics:

- 1. They are both very fragile (in most cases, they call for some form of sealer)
- 2. They are difficult to apply.

A further drawback, related to the first, is that they all hate masking tape.

With this in mind, I sprayed my model with two light coats of Tamiya's Silver Leaf (TS 30). This is supplied in a spray can, but I spray it into a cap and then pour it into an airbrush cup. The colour is both bright and fairly resistant. After a two-day drying period I very lightly applied narrow stripes

of low-tack masking tape (also from Tamiya), and on larger areas a thin layer of Humbrol Maskol. Then I airbrushed two coats of ModelMaster Metalizer 'Steel' (Ref.1402), which offers a much darker hue than the undercoat. To my surprise, everything went OK when it came to peeling off all that masking material! The (protecting) plate aft of the rocket exhaust is probably subject to very high temperatures and this is duplicated by airbrushing very light traces of Tamiya's translucent blue and orange, thereby giving the impression of overheated metal.

The plates covering the cannon troughs are adhesive aluminium foil, a regular and even shape being achieved by means of 2 sheet metal templates that I made. As usual, after all decals had been applied, everything was sealed by several light coats of home-made varnish (mixture of Testor's Dulcote (2/3) and Gloss (1/3)).

One word on the decals. They are of a high gloss variety, but have poor adhesive properties. Conversely, the roundels are in perfect register and all images seem accurate with the exception of the tricolour rudder stripes. These suffer from the white centre bar being too wide. This causes a problem as the SNCASO logo, name and number of the aircraft are superimposed on it. The best bet is to cut these elements out of the decal, remove the rest of the white sections and replace with plain white decal and then add the logo elements on top once dry.

Summary

Summing up, this is the kind of model I love, as it offers a sound overall shape and accurate dimensions. This is coupled with the original nature of the subject, and a personal involvement by the modeller. It's a pity that this model remained a 'one-off' and that this manufacturer disappeared. All it needed was a few improvements that would inevitably have been added to subsequent models (mainly resin parts). We would have been able to add to our collection all those fascinating prototypes of the immediate post war era.

Jacques Niot

Reference Sources

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Aviation Magazine No.1 (May 1950)
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And, of course, the magnificent photos on the assembly sheet.



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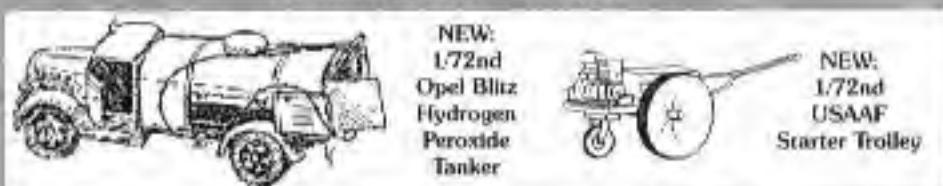
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Albatros Aces of World War I

by Norman Franks

Price: £11.99 (\$17.95)

Series: Aircraft of the Aces No.32

ISBN: 1 85532 9603

Publisher: Osprey Publishing

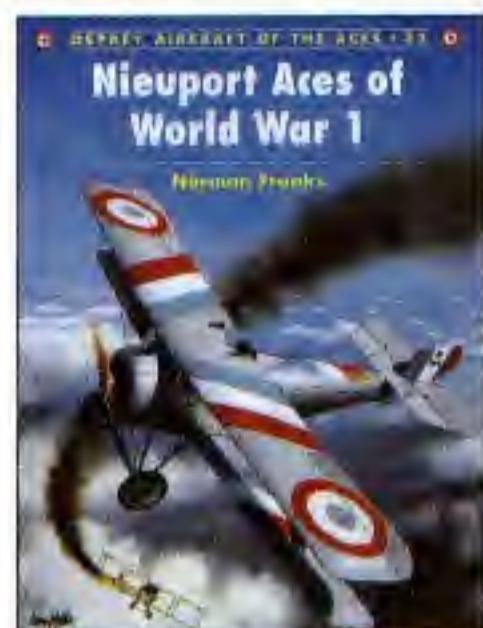
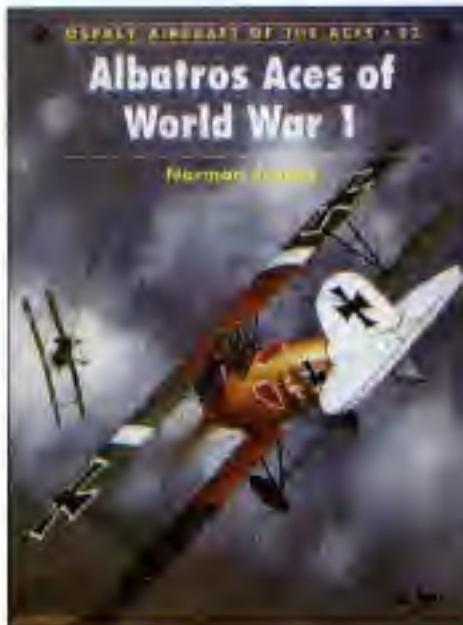
Format: 18cmx24cm, 96 page, laminated card cover

This title is in the standard format for the series. The narrative is concise and informative and is well illustrated with lots of period B&W photos. The text is split into three main sections. The first deals with the Jastas operating the Albatros D.II to D.V on

the Western Front. Next is a chapter looking at the potential of the new D.V and D.Va, as well as the units that operated these types. The final section looks at the late war Fighter Groups and takes quite a detailed look at the aces who flew with them. The centre pages offer 40 colour profiles and there are 1/72nd scale drawings included at the back.

This is another excellent title in this series from Osprey and one which can be recommended to all WWI fans

Our thanks to Osprey Publishing for the review sample.



Nieuport Aces of WWI

This title is in the same format as the previous one, and once again offers 40 colour profiles in the centre pages and 1/72nd scale plans at the back. The narrative is split into coverage of British and French aces who flew the type, and the final chapter takes a look at other Allied aces who flew Nieuport scouts, as well as some machines that were captured by the Germans. Each section is illustrated with a large number of period B&W photos and great aces like Guynemer, Nungesser, Raoul Lufbery, Willy Coppens and Major A.A. Kozakov

by Norman Franks

Price: £11.99 (\$17.95)

Series: Aircraft of the Aces No.33

ISBN: 1 85532 9611

Publisher: Osprey Publishing

Format: 18cmx24cm, 96 page, laminated card cover

are all covered.

This is another excellent title, and one we can recommend to all WWI fans.

Our thanks to Osprey Publishing for the review sample.

Fiat CR.32 and CR.42 In Action

by George Panka

Price: £6.99

ISBN: 0-89747-411-2

Publisher: Squadron-Signal Publications

Format: 28cmx21cm, 50 page, laminated card cover

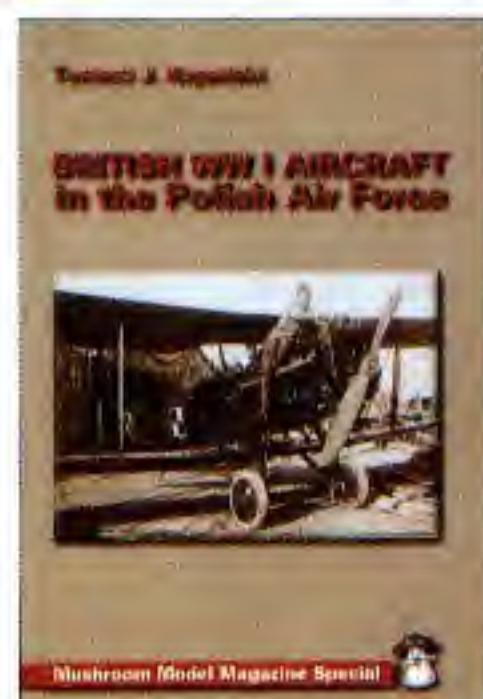
The latest 'In action' title from Squadron is in the usual format for this series with the narrative text backed up with a good selection of scale side views, as well as period B&W photographs. Pre-war and wartime service are covered, along with the Hungarian use of the type. The detailed

photos and diagrams include clear views of the CR.32 and CR.42 cockpit interiors, as well as such areas as the undercarriage, filters and flame dampers. Scale plans are also included for most variants and the centre pages offer ten colour side views of the types. Belgian, Swedish and German use of the CR.42 is also covered and the photos include some interesting detailed shots of personal insignia and markings applied to these machines.

Another excellent title in this series from Squadron-Signal and one that can be recommended to all Italian aircraft fans.



Our thanks to Squadron-Signal Publications for the review sample.



WWI British Aircraft (Polish)

This book covers such types as the Bristol F2b, Sopwith Dolphin, Martinsyde Buzzard, Sopwith Camel, RAF SE.5a, DH.9, RAF RE.8, Avro 504K, HP 0/400 and Sopwith 1 1/2 Strutter in Polish service. Basically it takes a short look at each type and details their use by the Polish Air Force and each chapter is illustrated with a number of B&W period photos. The subject matter is definitely of interest and the photos and information are of great use. Eight pages at the rear of this title offer colour side profiles of a number of these types, all of which are computer generated.

Examples of this book can be obtained directly from Mushroom Model

by T.J. Kopanski

Price: £9.99

ISBN: 83 88006 59 2

Publisher: Mushroom Monthly

Format: 25cmx17cm, 88 page, hardback cover

Publications, or via Midland Counties Publications and The Aviation Bookshop in the UK. American modellers can obtain their copies via Squadron. Mushroom inform us that future titles in this series are planned, although they will all feature a laminated card cover.

Our thanks to Mushroom Model Publications for the review sample.



Note: All of the items below have recently been released and are listed for our reader's information. Full reviews of each will appear in a future edition.

Airlife

Quite a few new titles from Airlife this month. The first is not really for modellers, but will be of interest to both UK and worldwide readers as it is UK Airports and Airfields - A Spotter's Guide by Tim Laming. This title offers a detailed list of each airfield in the UK along with information on the types of machines there and the activity. Each site has a clear map, with local roads etc and there are details of viewing areas etc. At £12.95 this 300 page book is a real must if you want to visit any UK airfield.

The tenth title in the Airlife's Airliners series is now available. This 128 page, 21cmx30cm title has a laminated card cover and deals with the Airbus A310. As with other titles in this series this new one is crammed full of high quality images of the type, along with a detailed look at the type's construction and equipment. At £16.95 this is an ideal title for all civil aircraft fans.

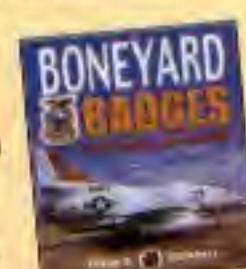
The Vital Guide to Commercial Aircraft and Airliners seems a bit of a mouthful for such a small title, but this 122 page, 155mmx215mm title offers a concise listing of all commercial aircraft and airliners. The guide is in alphabetic (manufacturer) order, with full historical and technical data for each entry. At just £9.95 this is a very useful guide and reference source for all civil aircraft fans.

The next title from Airlife is Charter Airlines - Their Aircraft and Colours by John K. Morton. This 23cmx27cm title offers

112 pages and a laminated card cover. Inside you get a huge selection of high quality images of a large number of charter airlines and their machines. Each airline gets about three pages a piece, and there are between two and five appropriate photos as well. Narrative is restricted to a 'scene setter' just to outline the company's activities and aircraft and for the modeller this book offers a wealth of possible colour schemes, as well as acting as a reference source to check the accuracy of existing decals etc. The UK price for this title is £16.95.

The final new title from Airlife this month is Boneyard Badges - Aircraft and Emblems at Davis-Monthan AFB by Philip D. Chinnery. This 23cmx27cm title offers

112 pages and a laminated card cover. Inside, as the title suggests, is a wealth of high quality colour photos of aircraft stored at Davis-Monthan AFB, along with close-ups of special badges and insignia carried by them. The quality and clarity of these images, coupled with the size they have been reproduced should have a few decal manufacturers rushing into production (well let's hope so!). At £16.95 this title is one any nose-art fan will love, and for those of you who have some of the previous titles on the Davis-Monthan site, this will add the last 10 years to the story.



News

News

AD Graphics

The latest title from this publisher is the second part of their *Mirage to Kfir* series and it deals with the IAI Nesher. This 21cmx30cm title offers 32 pages and a laminated card cover. Inside is the usual high quality descriptive text and photographs charting the use of the Nesher by the IAF. Much of the information is new, but because some information is still classified by the IAF certain things like squadron numbers etc have had to be omitted. That said this title is a real must for all IAF fans and a welcome addition to AD Graphics' expanding range. This title is £30.00 but dealers are welcome to contact AD directly about distribution etc.

Hikoki Publications

The latest title from this publisher is 'Stormbird' by Hermann Buchner. This 176 page, 21cmx29cm title has a hardback cover and a separate colour dust jacket. The author started to learn to fly with the pre-war Austrian Air Force, then became an instructor with the Luftwaffe. He also undertook low-level bombing operations on the Eastern Front as a bomber pilot and towards the end of the war became one of many ex-bomber pilots that were trained to fly the Me 262. Here he became an ace with JG7, having already scored 46 victories in Russia, and added another 12 kills while flying the Me 262.

This whole story is backed up with colour artwork of the aircraft Hermann flew, along with some of those he flew against and the final sections of the book show his flying logs as well as all the documentation relating to the awards he was given.

This is a fascinating title with a great deal of information and is highly recommended to all Luftwaffe fans. This title costs £24.95 (\$39.95) and can be obtained from Midland Counties Publications.

Crowood Press

The next two titles from this publisher will be on the Boeing 747 and Vickers VC10. The former is by Martin Bowman and will offer 192 pages (8 in colour) with a hardback cover and separate colour dust jacket. The latter is by Lance Cole and will be in the same format. Each will be £29.95 and should be readily available by the time you read this.

Peregrine Publishing

This is a new publisher from the USA and they have just released a 'photo essay' on the F2G-1 Corsair. This title comes in a 21cmx28cm format with just twelve pages and a laminated card cover. Inside you get thirty colour photos, inside and out of a preserved F2G-1. Each photo has a descriptive caption and the image size is such that you only get about two or three per page. Each photo is in colour and of good quality. This is the first in a new series of titles from Peregrine and the only price we currently have for it is \$7.95.

Boeing B-52 Stratofortress

by R.F. Dorr & L Peacock

Price: £18.99 (\$29.95)

ISBN: 1 84176 0978

Publisher: Osprey Publishing

Format: 19cmx27cm, 227 page, laminated card cover

This book takes a very detailed look at the B-52 and the narrative text is well illustrated with over 130 B&W and 40 colour photographs. The depth of coverage is extremely good, with separate chapters looking at the evolution of the Superfortress design, its adoption by the USAF, technical features of the type and the arrival of the B-52B, C and D models into the USAF inventory. Further chapters chart the use of

the type in Ground Alert operations, a detailed look at the weapons carried by the type and the use of the type in war. Operational use in Laos and Cambodia is also covered, along with Chromedome and Linebacker II operations and the use of the type in Desert Storm. Low-Level operations and the decline of the type over the past 30 years complete the coverage and the appendices include technical specifications, serial number allocation, squadrons and bomb groups that operated the type, a full list of losses and much more.

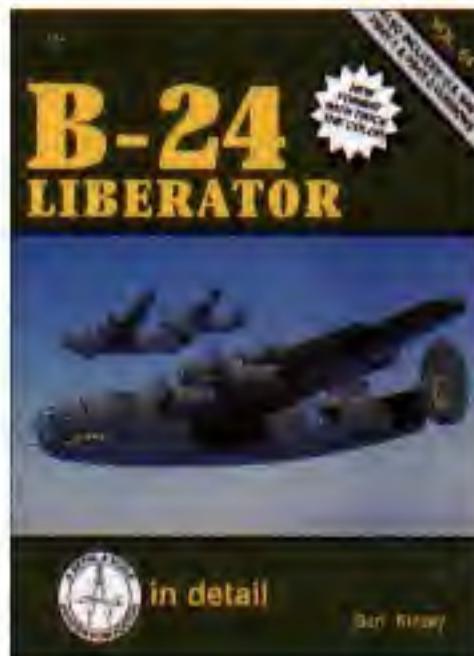
This is a 'must' for any B-52 fan and for the modeller the information coupled with the clear photographs will make it an ideal reference source for anyone considering modelling the type.

Boeing's Cold War Warrior

**B-52
STRATOFORTRESS**



Our thanks to Osprey Publishing for the review sample.



B-24 Liberator In Detail

by Bert Kinney

Price: £10.95

ISBN: 1-888974-17-6

Publisher: Squadron-Signal Publications

Format: 22cmx28cm, 80 page, laminated card cover

This latest title in the popular In Detail & Scale series covers all versions of the B-24 as well as the US Navy variants (PB4Y-1 and -2). The narrative is limited to a short introduction to each version and then the coverage is achieved with a good selection of black and white photos of complete airframes and detailed shots of the interior

etc. The colour pages offer a couple of colour side profiles, a nice selection of period colour photographs and a selection of detail photographs inside preserved examples in the USA. The level of detail offered for each version in such a small number of pages is excellent, and this title should leave you with no doubt as to what each version was like, both inside and out.

Another great title in the series from Squadron-Signal and one that I am sure all USAAF fans will want to own.

Our thanks to Squadron-Signal Publications for the review sample.

B-17 Units of the Eighth Air Force

by Martin Bowman

Price: £12.99 (\$19.95)

Series: Combat Aircraft No. 18

ISBN: 1 84176 0218

Publisher: Osprey Publishing

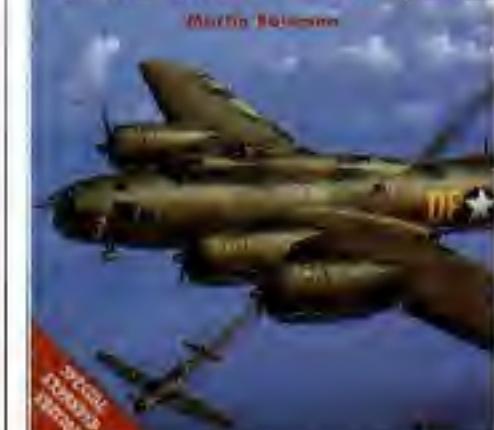
Format: 18cmx24cm, 112 page, laminated card cover

This title takes the usual format for the series and although covering all the history of these units in so small a book is impossible, the author has gone a long way to deal concisely with all the groups and

operations of the war by 8th AF B-17 groups. The narrative starts off with the arrival of the USAAF in the UK, then takes a look at the expansion of their presence and the increase in operations. 'Black Thursday' and beyond is covered next, looking at the terrible losses inflicted on these groups, and how they continued to attack Europe regardless of the losses. The 'Big Week' and 'Big B' periods are next to be covered, looking at mass attacks of these groups and the final chapter looks at the last stages of the war with the 8th AFs thrust deep into



**B-17 FLYING
FORTRESS UNITS
OF THE EIGHTH AIR FORCE (part 1)**
Martin Bowman



Germany. The centre pages offer forty colour profiles of B-17s as well as a couple of pages of colour nose art. The scale plans at the back of the title are to 1/108th scale, so enlargement by x1.5 will result in 1/72nd scale.

This is a concise and informative title and although most of the photographs are well known, it is certainly a title worth adding to any USAAF collection.

Our thanks to Osprey Publishing for the review sample.

North American F-86D/K/L Sabre Part 1

by Ray Wagner

Price: \$17.95

Series: Air Force Legends No. 202

ISBN: 0-942612-99-X

Publisher: Ginter Books

Format: 22cmx28cm, 96 page, laminated card cover

This is the first part of a two-part coverage of the F-86D, K and L, and it deals with the design, structure and testing of these variants. The narrative text is quite limited, being restricted to brief outlines to each section, but the title is still crammed with clear black and white photos and manual extracts. The whole strength of this title is

in the illustrations it offers and the wealth of information they hold. The photos are mainly close-up, with shots of the cockpit, wheel wells, engine and engine bay, as well as the weapons system (including a D firing its Mighty Mouse rockets through the nose due to a mis-fire!). The final section takes a look at all kits of the D, K and L versions as well as offering a set of 1/72nd scale plans of the F-86K.

A real 'must' for any Sabre Dog fans and one I am sure all USAF fans will want as well.

Our thanks to Ginter Books for the review sample:



News

Guideline Publications

A new range of books dealing with camouflage and markings has been launched by this publisher with the release of the first part. This deals with RAF Fighters from 1945 to 1950 (UK based) and is 21cmx29cm with 92 pages and a laminated card cover. Inside you get details about the various camouflage and markings applied to the subject along with a good selection of photographs and colour artwork. The layout and design will be familiar to anyone who has read Guidelines other monthly magazine and this first title is £14.95.



Air-Britain Publication

The latest title from this historical group is The D.H.4/D.H.9 File. Written by Ray Sturtivant and Gordon Page, this title has no fewer than 316 pages and a hardback cover. Those of you who are familiar with the Air-Britain 'File' series will know what this latest one contains, but if you are not, basically it lists all D.H.4 and D.H.9s built along with their history. Details of production contracts for each batch, along with squadron allocation and details of all foreign operators are also included and the whole thing is heavily illustrated with period B&W photographs. Anyone interested in this fascinating title can obtain it for £30 directly from Air-Britain.



Spitfire

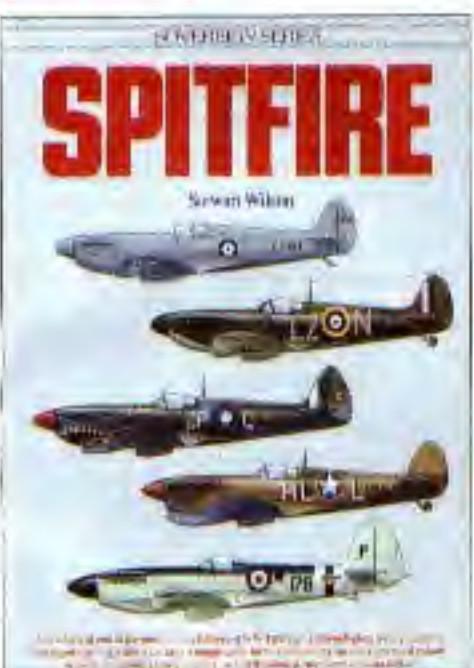
by Stewart Wilson

Price: £14.95

ISBN: 1-875671-45-5

Publisher: Airlife

Format: 21cmx28cm, 164 page, laminated card cover



The latest title is actually produced by Aerospace Publications Pty in Australia, but distributed in the UK by Airlife. All of the content is black and white, with the exception of eight pages in the centre which offer colour side profiles by Juanita Franz. The book is basically split into two sections, one which briefly deals with each Spitfire

and Seafire type, and the other which chronologically looks at the history of the type. The appendix at the end of the title lists all Spitfire and Seafire serials. The level of detail offered in this type of title is of course limited, and in this example the rather poor quality paper does little to improve matters, that said the title does include a lot of facts and a good selection of photos. For the modeller it is a quick reference source for the type, but you will need additional information to clarify details on each type.

Certainly a well structured title and considering the subject I am sure that it will be well received.

Our thanks to Airlife Publishing for the review sample:

Lockheed NF-104A

by Scott Libis

Price: \$10.95

Series: Air Force Legends No. 204

ISBN: 0-942612-97-3

Publisher: Ginter Books

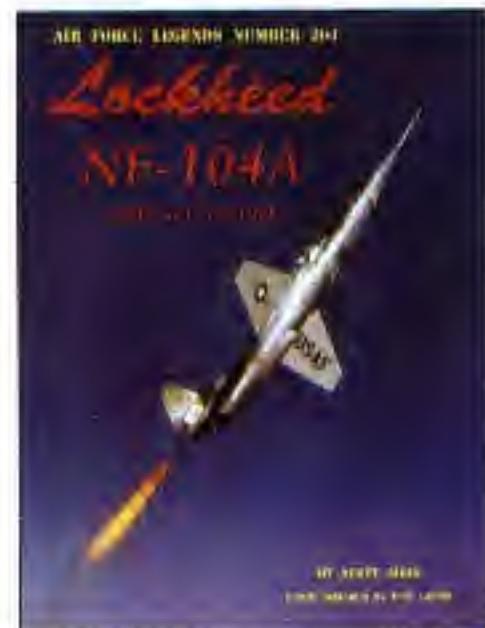
Format: 22cmx28cm, 44 page, laminated card cover

This is another Air Force Legends title and it is in the same format as the previous ones reviewed elsewhere. The text details the development and testing of the type, which was basically a F-104 with a rocket motor tacked onto the back! That's not quite true, but this

title clearly charts the idea behind the design and its intensive testing. This is backed up with a mass of clear black and white photos as well as manual extracts. These all clearly show the modifications to the airframe, like the extended intake cones, as well as the revised cockpit layout and the reaction motor outlets on the wings and nose. The final section looks at the two conversion sets available for this type.

Definitely one for all USAF and record breaking aircraft fans. If you are considering modifying the new Hasegawa F-104 into this machine, then this book is a must.

Our thanks to Ginter Books for the review sample.



McDonnell XF-88 Voodoo

by Steve Pace

Price: \$12.95

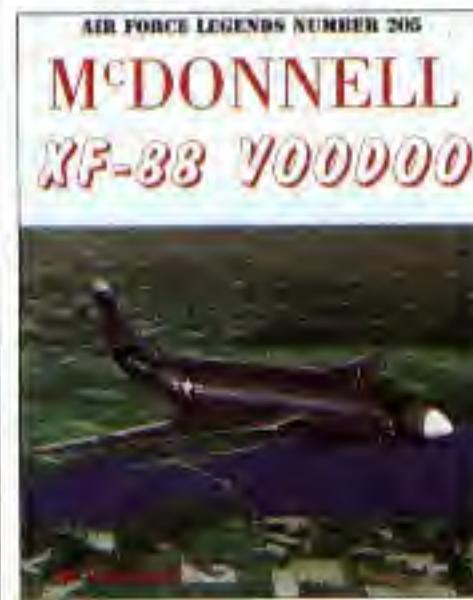
Series: Air Force Legends No. 205

ISBN: 0-942612-96-5

Publisher: Ginter Books

Format: 22cmx28cm, 56 page, laminated card cover

This final title from Ginter is in the same overall format as the previous ones. The narrative text is heavily illustrated with a mass of period B&W photos of the interior and airframe, coupled with flight manual diagrams and lots of photos of the complete aircraft in flight. The XF-88 was later to lead



Bookshelf

Martin XB-51

by Scott Llibis

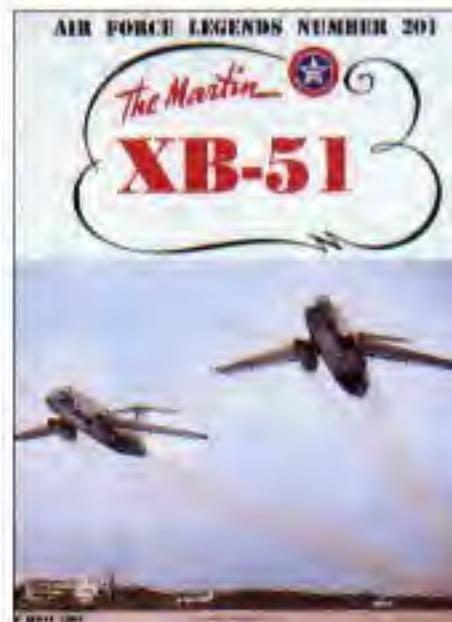
Price: \$10.95

Series: Air Force Legends No. 201

Publisher: Ginter Books

Format: 22cmx26cm, 48 page, laminated card cover

This is the latest title in the Air Force Legends series by Ginter and is in their usual format. The narrative text deals with all elements of the type's design and testing. All of this is illustrated by a wealth of clear black and white photos. These include great shots of the interior, wheel wells and engines as well as a great selection of the prototypes throughout their careers. The occasional extract and diagram from the



type's manual is also included and the final section lists all model kits of the type that have been produced (not that many!).

This is a superb title and one that all 1950s US jet fans will want to own. The level of detail, wealth of photographic coverage and well written text make it the best single reference source on this design.

Our thanks to Ginter Books for the review sample.

Sopwith 1 1/2 Strutter (2)

by J.M. Bruce

Price: £8.95

Series: Windsock Datafile No.80

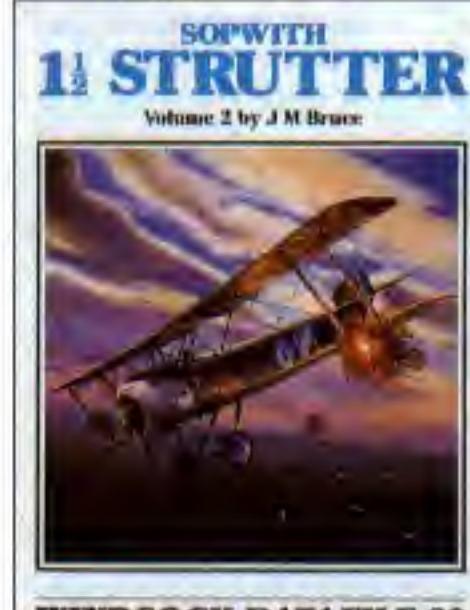
ISBN: 1-902207-22-X

Publisher: Albatros Productions

Format: 21cmx29.5cm, 36 page, laminated card cover

This latest title from Albatros is the second part of their coverage of the Strutter. It deals with the bomber versions and the highly informative text is coupled with a mass of period B&W photographs. Both 1/72nd and 1/48th scale plans are also included and the final chapter takes a detailed look at the camouflage and markings applied to the type during its service.

This is another excellent title from Albatros and one that all WWI fans will want. If you have Volume 1 (Windsock Datafile No 34), or any of the recent batch of Strutter kits, then you will need



WINDSOCK DATAFILE 80

this title as well.

Our thanks to Albatros Productions for the review sample.

de Havilland in Canada

by Fred W. Hotson

Price: US\$45.00

ISBN: 0 921022 10 7

Publisher: Canav Books

Format: 23cmx29cm, 376 page, hardback cover with separate card cover

This title is huge, offering 300+ pages in a large format with a hardback cover and separate colour dust jacket. The narrative deals with DHC from the early days with Tiger Moth and Mosquito production right through such types as

the Beaver, Otter, Dash 8 and Global Express. The title is lavishly illustrated with 800 photos, a large number of which are in colour. The coverage of each design is in-depth and the photographs are all clear and of a good size. Information about each design is linked with some of the personalities of the company and just about all types covered have a nice selection of colour photos as well. Close-up shots of the interior and engines of these machines make this title ideal for the modeller,

Ilya Muromets Type Veh

by Harry Woodman

Price: £16.50

Series: Classics of WWI Aviation No.80

ISBN: 1-902207-13-0

Publisher: Albatros Productions

Format: 21cmx29.5cm, 44 page, laminated card cover

This special has been written by Harry Woodman, who has spent some 30 years researching this design. The highly detailed text is illustrated with a mass of clear B&W photographs as well as diagrams and 1/72nd and 1/48th scale plans. Everyone who enjoys Harry's work in this magazine will recognise the quality of this title and the detailed coverage of this type is the first that has ever been done outside Russia.

The level of information and the wealth of photographs will make this title a real must for all Russian and early aviation fans.

**ILYA MUROMETS
Type Veh**



It is highly recommended to all.

Our thanks to Albatros Productions for the review sample.

Battle over Bavaria

by R. Forsyth & J. Scutts

Price: £TBA

ISBN: 09526867-4-0

Publisher: Classic Publications

Format: 23cmx31cm, 200 page, hardback cover with a separate dust jacket

This special title looks at the encounters between the USAAF B-26s and Luftwaffe Me 262s during the final month of WWII. The title is basically split into two main parts. The first one looks at the groups and aircraft involved, and the other looks at the battles themselves. The former includes a detailed look at the main protagonists: Me 262 & Martin B-26 Marauder. The groups involved are also covered, with JV44 of the Luftwaffe and the 17th, 323rd and 344th Bomb Groups and 50th and 365th Fighter Groups. The latter section deals with the encounters between all these groups over Bavaria in the latter stages of the war. This section includes a lot of personal accounts from both sides of the battle and it is all backed up with a great selection of period B&W photographs and diagrams. This is further enhanced with a large selection of colour profiles by Eddie J. Creek in the centre pages as well as some clear



wartime colour photos.

Really another 'must' from Classic and one that will appeal to USAF and Luftwaffe fans alike. The story it tells is of a desperate struggle during the last months of the war between two sides and the rather different weapons in which they were fighting. Certainly one we can highly recommend to all.

Our thanks to Classic Publications for the review sample.

and the colour shots can offer some interesting colour schemes.

To be truthful this title is a real gem and one I would highly recommend to all. The quality of presentation coupled with a very informative text make this 'the' reference source for DHC. If you are considering any DHC type, or are just interested in their activities, then this title is for you. Currently this is only available directly from the publisher, but we recommend it most highly to you all.

Our thanks to Canav Books for the review sample.



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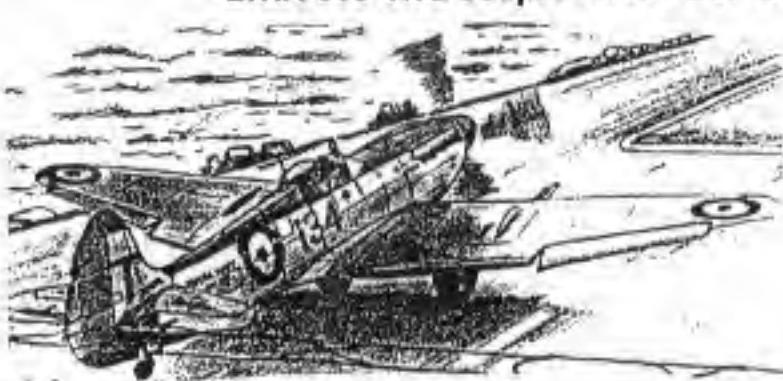
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● IPMS (UK) WEB site at

<http://www.users.globalnet.co.uk/~ipmsuk>. Contact Sue Allen, 8 Oakwood Close, Stenson Fields, Derby, DE24 9ET. E-Mail: sue@ipmsuk.globalnet.co.uk

● AAM/IPMS PORTUGAL. Please contact Antonio Neves Santos - R. Prof. Camilo Oliveira, 86A - 4420 GONDOMAR or Tel: 02 4540525.

● THE ABERDEEN MODELLERS SOCIETY. Contact David Robertson, 27 Howes Drive, Aberdeen. Tel: 01224 890895.

● ABINGDON IPMS. For information contact Tony Clements on 01235 522893.

● AERO SPACE & VEHICLE Club Wombourne, Nr Wolverhampton. For details contact J. Van-Leerzen on 01384 278800.

● IPMS Avon. Contact Andy Hills (01454 618085) or Phil Evans (01454 852133).

● AVRO LANCASHIRE IPMS. Contact Ian D. Southwood on 01706 224 798 from <mailto:ianD@KSouthwood.freemail.co.uk>

● BIRMINGHAM IPMS. For more details call 0121 550 0515.

● BAY MODELLERS CLUB, Bay of Plenty, New Zealand contact Peter Cook on (NZ) 07-575-6517 or Email R-SHC@xtra.co.nz

● BANBURY SCALE MODEL CLUB. Contact Reg Gray on 01295 284875.

● BARNET IPMS. Contact Pete Stern (Secretary) on 0181 449 7854.

● UMS (UNIVERSITY MODELLING SOCIETY)

BIRMINGHAM meets every Thursday at Centre 13 Community Centre, School Road, Mossley, Birmingham.

● IPMS Bolton (New Branch). For more details contact Richard on 01204 699379 or Email ipms.bolton@tsk21.com.

● BRAMPTON SCALE MODEL CLUB (incorporating IPMS Brampton). Contact Sam Bratty, 39 Ermine Way, Sawtry, Huntingdon, Cambs, PE17 5UQ. Tel: 01487 630689.

● IPMS (CANADA) LONDON. Contact Kerry Traynor on 1-519-453-4418.

● CHELMSFORD MODEL CLUB. Please note that this club has merged with the Essex Scale Model Society (see entry elsewhere).

● CHAPITRE REAL COTE (Montreal, Canada). For information contact Jean Marc Perreault. Tel: 450 659 5241 Email: jmarcp@megaweb.ca

● THE CLACTON BRANCH of the IPMS. Contact Peter Terry on 01255 428853.

● IPMS CLEVELAND. Contact: Mike Burns on 01642 682357 or Gary Stevenson on 01642 490589.

● COVENTRY AND WARWICKS IPMS. Contact: Dave Eales for more info on 01926 313330 (phone and fax) or Email: eales.mobi@aol.com

● CORNISH SCALE MODELLER'S SOCIETY. For more details contact Tim Rowley (Secretary), 45 Bodriggy St, Hayle, TR27 4ND Tel: 01736 757945 or Mike Fisher (Treasurer), 8 Porhbean Rd, Newquay TR7 3JE (Tel: 01637 874545).

● DERBY CITY MODEL CLUB. Contact Gavin (10am to 6pm Saturdays) on 01332 757873 (Tel/Fax) or Julian (evenings) on 01332 514193.

● IPMS DERBY & DISTRICT. New branch secretary; Jason McWilliam, 36 Matlock Road, Chaddesden, Derby, DE21 4NY

● IPMS-Deutschland e.V. Contact: Günther Lindow, Bergergrüne Strasse 5-7, 14129 Berlin, Germany. Email: Volker.Helms@t-online.de

● EAST KENT MODEL CLUB meets in Ramsgate. For details contact Stu Davies on 01843 867404.

● EAST MIDLANDS MODEL CLUB. Contact Gordon Upton on 01455 230952 (day) or 01455 878722 (evenings).

● EAST NEUK MODELLING CLUB For more information contact Brian on 01334 655131 or Dave on 01334 652439.

● IPMS ESSEX/HARLOW. For details and an information sheet, please ring Steve Hubbard on 0181 514 3840 or 0860 228194.

● ESSEX SCALE MODEL SOCIETY (incorporating Chelmsford Model Club). Contact D. Ball on 01245 604552.

● EASTERN SUBURBS SCALE MODEL CLUB (ESSMC). Box Hill, Vic. Australia. For more details contact Pete McKinnon, 61 + 3 9725 5480 or write to: 38 Clegg Ave, Croydon, Vic 3136, Australia.

● "FAMAS" (PRONOUNCED "FAMOUS") journal of the Frog & Airfix Model Aircraft Society. Contact: FAMAS, 35 Rosebery Road, Salford Park, Cramlington, Northumbria, NE27 0BX.

● IPMS FENLAND/SPALDING MODEL GROUP. Contact Mr B. Pickering 01775 710465.

● GLASGOW IPMS. Non-IPMS members welcome. Contact Bruce Smith on 0141 563 2098.

● GLOUCESTER IPMS. Contact Jeff Brown, 125 Pleasant Way, Beaches Park, Cirencester, GL7 1BZ. Tel: 01285 659254.

● GRANTHAM MODEL CLUB. Contact John Thinder on 01476 670816 or Craig Gardiner on 01476 401483.

● IPMS GREECE (CORFU BRANCH) Contact 0030 661 41506 or Fax 0030 661 41114.

● GUERNSEY PLASTIC MODELLERS GROUP. Contact Dave Nash, 7 Pierre Perree Villa, Prince Albert Road, St Peter Port, Guernsey, GY1 1EZ. Tel: 01481 728186.

● THE HARROW MODELLING SOCIETY. Contact Roger on 020 89576051 for more details.

● HOBBY DEPOT MODELER CLUB. Contact M. Fuller, 1524 Est Summer St., Hartford, WI 53027, USA.

● IPMS HORNCHURCH. New Club Secretary: Dave Ryan, 36 The Lintons, Linton Road, Balding, Essex, IG11 8HS. Tel: 0181 584 4670.

● ISCA SCALE PLASTIC MODEL CLUB - East Devon. Contact Mr K. Sweeting 10, Old Barn Close, Stoke Canon, Exeter, Devon, EX5 4AD.

● IPMS KENT. For details contact Jim Chapman, 77 Sutherland Avenue, Petts Wood, Kent, BR5 1QY. Tel: 01889 822669.

● IPMS KINGSTON (CANADA). Contact Tony on 389 4878.

● IPMS PROVINCES OF FRANCE. The URL for IPMS Provinces of France changed to <http://www.multimania.co/epmnsd/index.htm>

● IPMS SOUTH AFRICA. For further details contact Colin Burgess on 011 462 3548 or Email alberttni@global.ca.za or visit or Web site at www.klimoerley.co.za/pimssa.

● IPMS SOUTH EAST LONDON please ring Paul Brack on 0181 650 6504 or Alan Partington on 0181 697 6929.

● IPMS STE HELENE (Montreal, Canada). For information contact Jean Marc Perreault. Tel: 450 656 7243.

● IPMS TORONTO (CANADA). Contact IPMS Toronto, 3219 Yonge St, Suite 334, Toronto, Ontario, M4N 2L3, Canada.

● IPMS UK Fleet Air Arm Special Interest Group. For more details contact Steve Hubbard on 0208 514 3840.

● IPMS YU-VOJVODINA (Yugoslavia). Contact Nenad Miklisev, Bulevar Velika Vlahovica 56/10, 23000 Zrenjanin, Yugoslavia. Email: modelart@ptt.yu

● LINCOLN MODEL CLUB (IPMS Lincoln). For more information, contact Ian Crawford on 01522 533380.

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Special Interest Groups (SIGs)

● WORLD WAR ONE SIG has a new website at <http://www.users.globalnet.co.uk/~ipmsuk/wingswresig.htm>

● WINGS 'N' WIRES. IPMS World War I Aircraft SIG. Contact Alan Crow, 55 Merton Lea, Blaydon, Tyne & Wear, NE21 4EY.

● SIGPMA A NEW SIG for all those interested in Portuguese Military Aviation. Contact: PD. Box 52054, 4202 - 801 Porto, Portugal. E-mail: ruidom@mail.telepac.pt

● YUGOSLAV AVIATION SIG discussion board at <http://disc.server.com/58276.htm>

● HELICOPTER MODELLERS - Interested in a quarterly newsletter produced by like minded enthusiasts? For more details contact: Pete Tasker, 22 Brookfield, Haslington, Crewe, CW1 5WE

New Clubs (Forming)

<h2

Events

Scale Aviation Modeller International will advertise forthcoming events in this column free of charge for event organisers who wish to give advance notice of their shows. We will continue to run your notice until the event is held, space permitting.

Forthcoming Events

- **May 27th.** Torbay Model 2000, Torquay Town Hall. Contact Paul Thompson on 01803 550520.
- **June 2nd & 3rd.** IPMS Region IV Convention, Radisson Airport Hotel, Columbus, Ohio. For more details contact Steve Rothrock, 2427 Sonnington Drive, Dublin, Ohio 43016, USA or Email: rothrock@iwaynet.net.
- **June 3rd.** IPMS Salisbury Model Club, 3rd Annual Show, Hall of Wyvern College, Laverstock, Salisbury, Wiltshire. Contact David Lane, 13 Park Street, Salisbury, Wiltshire SP1 3AT. Tel: 01722 327498 Fax: 01722 501518, Email: d.lane@btconnect.com.
- **June 3rd.** Tocan 2000, IPMS Toronto at The Toronto Board of Trade Airport Centre, 830 Dixon Road, Toronto, Canada. Contact Paul Roberts (905) 455 0081, Email: proberts@tacomotec.com or Chuck Rothman (905) 869 1096, Email: rothman@interlog.com.
- **June 3rd.** 2nd Annual Hobby Depot Contest & Show, Hobby Depot, 1524 E. Sumner (Hwy 60), Hartford, WI 53027, USA. Contact John or Sharon on (262) 670 6242.
- **June 3rd & 4th.** The Northern Model Show, Temple Park Leisure Centre, South Shields. Contact Rob Sullivan, 6 Riverside Close, Blackhall Mill, Tyne & Wear, NE17 7LW.
- **June 16th, 17th & 18th.** Mondial de la Miniature, Espace Autun, Place de la Porte d'Autun, Paris 16ème, France.

Miniature, Espace Autun, Place de la Porte d'Autun, Paris 16ème, France.

- **June 24th.** Aray Modèles Club, 13th Modeling Day, IPMS Huy, 6 Avenue Delchambre, B-4500 Huy, Belgium. Contact J-P Dewar, 88 rue de la Forêt, B-4100, Seraing, Belgium. Tel: 00 32 4 337 07 88.
- **July 2nd.** A Fort Full of Models', Newhaven Fort, Newhaven, East Sussex. Contact Mid-Sussex IPMS, 15 Aspen Walk, Haywards Heath, RH16 3R8. Fax/Answerphone: (01273) 596581.
- **August 12th.** The 2000 'Virginia Shootout', Salem Civic Center, Salem, VA. For more information contact Jeff Hinchee (540) 989 7723 or Email: J Hinchee@aol.com.
- **August 12th-13th.** Bournemouth Model Spectacular, The Pavilion, Westover Road, Bournemouth, Hants. Contact: John Bothamley (01202) 527723.
- **August 18th-19th.** IPMS Regional Model Contest and Swap Meet, Holiday Inn, Mesa, Arizona, USA. For more information contact Dick Christ, Tel: 480 983 7131 or Email: dickc24@aol.com or Jim Frey, Tel: 623 975 9565 or Email: jamecorlanelly@msn.com.
- **August 21st-22nd.** Hong Kong Open Modelling Competition, YMCA International House, Kowloon, Hong Kong. For more details visit the clubs website at <http://members.hknet.com/~hkssnv/>.
- **September 2nd.** Birmingham Aircraft Enthusiasts Fair, National Motorcycle Museum, Bickenhill, Birmingham. Contact C. McQuade 01543 250389 or Email: speedbird70@aol.com.
- **September 3rd.** Aero Space & Vehicle Club Model Show, The Community Centre, Church Road, Wombourne, Nr. Wolverhampton, West Midlands. Contact J. Van Leerzen, 163 Bells Lane, Steybridge, West Midlands, DY8 5DS.

● **September 3rd.** IPMS Brampton Annual Show, The Priory Centre, St Neots, Cambridge (New Venue). Contact Sam Bratby 01467 830689.

● **September 10th.** Sutton Coldfield Model Makers' Society Model Spectacular 2000, Contact Peter Haywood on (01889) 578074 or Email: p-haywood@madasfish.com.

● **September 17th.** Modelfest 2000 Model Show, IPMS Farnborough, Frogmore Community Campus, Yateley, Hants.

● **September 17th.** Wings and Things 2000, Spalding Grammar School, Contact Mr Bill Pickering on 01775 710465.

● **September 23rd.** Svasmicon 2000, 16th Annual Contest, PA National Guard Armory, 740 North Hermitage Road, Hermitage, PA. Contact Tim Reacher, 4131 Wymondwood Drive, Sharpville, PA 16150, USA. Tel: (724) 962 2879. Email: timrace@infoline.net.

● **September 24th.** Chiltern Scale Model Show at the Mosquito Museum, Salisbury Hall, Herts. Contact Dr R.M. Wallsgrave, 36 Ver Road, Redbourn, Herts, AL3 7PE. Tel: 01582 792126.

● **September 24th.** Bolton Model Bonanza, Ridgemont House, Horwich, Bolton. For more information contact Dave on 01204 895375 or Email ipms.bolton@talk21.com.

● **September 24th.** Cape Cod Scale Modelers Association 9th Annual Model Show and Contest Hyannis Elks Lodge, 652 Bearse's Way, Hyannis, MA, USA. For information call Ron (508) 394-5513 or e-mail Richard at rreingo@capecod.net

● **October 1st.** IPMS Wallingford Model Show at Cholsey School. Contact George Clark (01491) 201902 or Steve Lovelock (01235) 817948.

● **October 21st & 22nd.** IPMS (UK) Modelworld 2000, Telford Exhibition Centre, Telford, Shropshire.

May 27th. ■ Tomay Model 2000.

June 2nd-3rd. ■ IPMS Region V Convention, Columbus, Ohio, (USA)

June 3rd. ■ 3rd Annual Show, IPMS Salisbury Model Club, Wiltshire.

June 3rd. ■ Tocan 2000, IPMS Toronto (Canada)

June 3rd. ■ 2nd Annual Hobby Depot Contest & Show, Hartford (USA).

June 3rd & 4th. ■ The Northern Model Show (South Shields).

June 16th, 17th & 18th. ■ Mondial de la Miniature, Paris (France).

June 24th. ■ Aray Modèles Club, 13th Modeling Day, Huy (Belgium).

July 2nd. ■ A Fort Full of Models, Newhaven.

August 12th. ■ The 2000 'Virginia Shootout', Salem, VA (USA).

August 12th-13th. ■ Bournemouth Model Spectacular.

August 18th-19th. ■ IPMS Regional Model Contest & Swap Meet, Mesa Arizona.

August 21st-22nd. ■ Hong Kong Open Modelling Competition, Kowloon.

September 2nd. ■ Birmingham Aircraft Enthusiasts Fair.

September 3rd. ■ Aero Space & Vehicle Club Show, Wombourne, (Wolverhampton).

September 3rd. ■ IPMS Brampton Annual Show (New Venue).

September 10th. ■ Sutton Coldfield Model Makers' Society Model Spectacular 2000.

September 17th. ■ Modelfest 2000 Model Show, IPMS Farnborough, Hants.

September 23rd. ■ Svasmicon 2000, Hermitage, PA (USA).

September 24th. ■ Chiltern Scale Model Show (Herts).

September 24th. ■ Bolton Model Bonanza.

September 24th. ■ Cape Cod Scale Modelers Association, Hyannis, MA, USA. For information call Ron October 1st. IPMS Wallingford Model Show.

October 1st. ■ IPMS Wallingford Model Show.

October 21st & 22nd. ■ IPMS (UK) Modelworld 2000.

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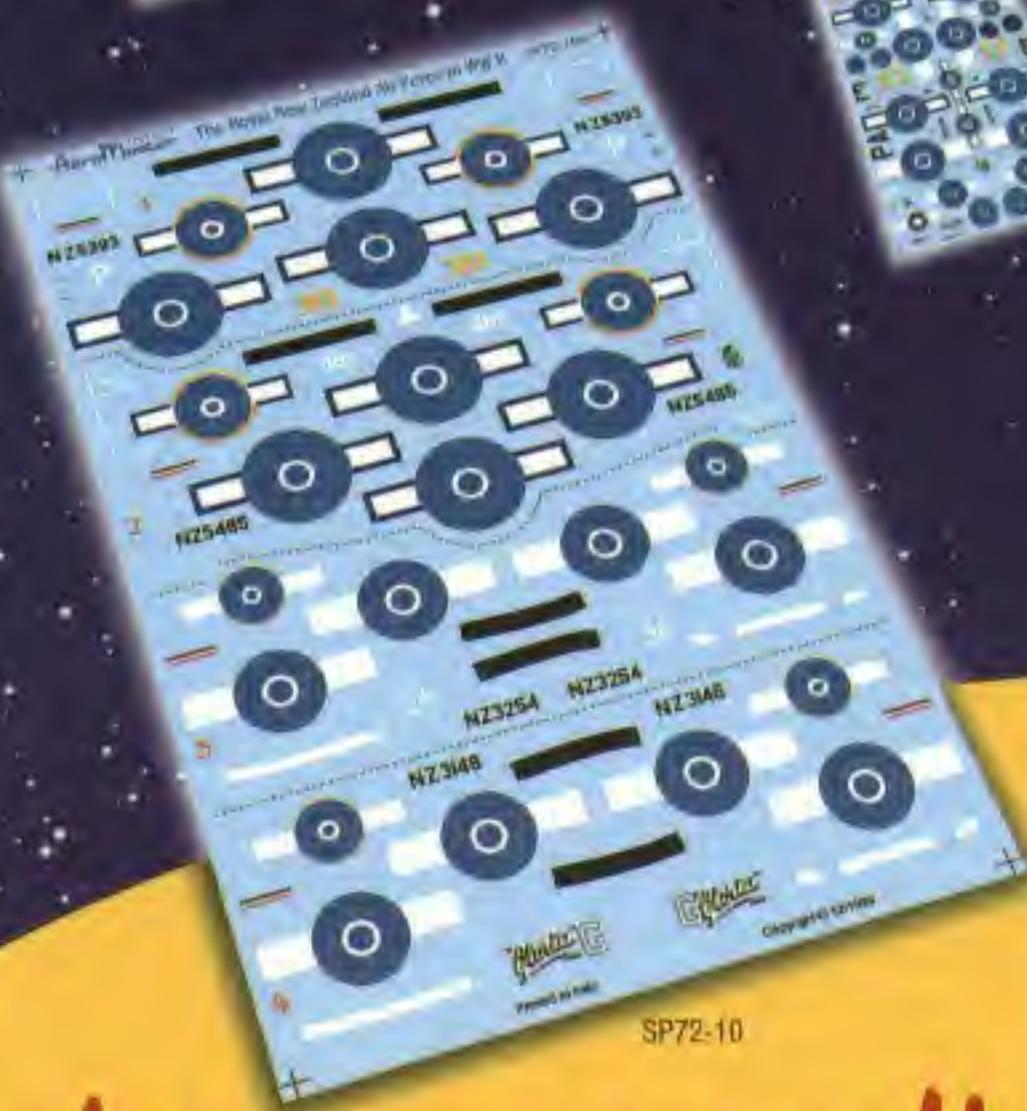
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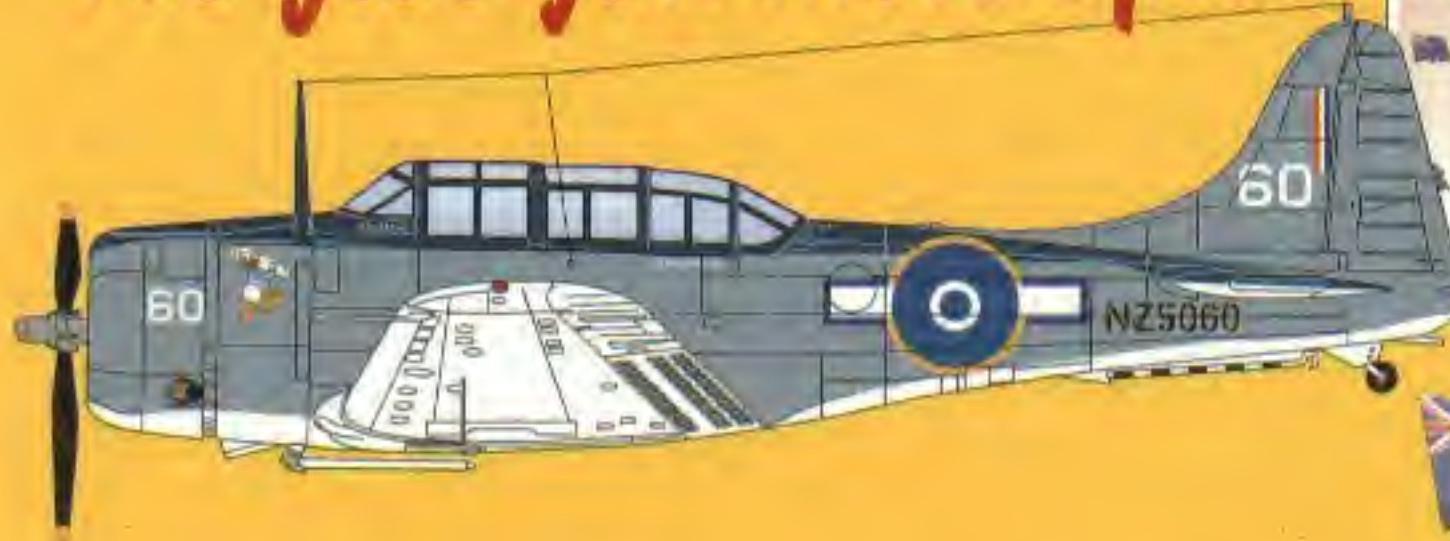
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